Brain Drain in Ethiopia's Health Sector

Perceptions of and experiences with medical brain drain among Ethiopian health workers

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Abstract

The global migration of health workers, also known as medical brain drain, exacerbates human resources for health (HRH) shortages in the countries of origin. These shortages disproportionally affect low- and middle-income countries due to the uneven distribution of health workers across the world. This is recognised as a major development challenge in these countries. The negative effects of brain drain are made worse by internal migration, which affects the distribution of health workers within countries and consequently access to health services for parts of the population.

Ethiopia is one such country that struggles with the retention of its health workers at all levels of the health system. This thesis explores how brain drain impacts the health workers that remain – and consequently also the health system – which has been given marginal attention in the literature in general. Through qualitative interviews with Ethiopian health workers, I illustrate what it is like to work in the Ethiopian health system, and I ask how health workers perceive and experience the effects of brain drain and attrition in the public health system in Jimma specifically and Ethiopia in general. I consult policy documents to look at the policy responses to brain drain and problems of retention, and through reviewing the literature I put this in the historical political context of Ethiopia. With this, I show that the current form of the Ethiopian health system, including the shortcoming and HRH problems, can be located in this context.

I find that the low-resource setting that the health workers operate within pushes many away, and in combination with low salaries many consequently choose to seek out other employment opportunities – either abroad or in Ethiopia. Having access to private practice opportunities, therefore, becomes an important factor for their retention. Furthermore, I also found that Jimma may struggle more with retention than similar places elsewhere in Ethiopia. Respondents said that this largely is due to infrastructural underdevelopment, which is also why health workers leave rural areas for urban areas in general. I argue that to create an effective policy for the retention of health workers, the health workers perceptions of and experiences with brain drain and working in the health system need to be examined in detail, and retention policies and strategies need to be informed by what pushes and pulls people away and by what makes them stay.

Keywords: brain drain, medical brain drain, emigration, health worker migration, Ethiopia, human resources for health

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List of abbreviations and acronyms

CED – Chief Executive Director

EPRDF – Ethiopian People's Revolutionary Democratic Front

ETB – Ethiopian birr (currency)

HEP – Health Extension Programme

HEW – Health Extension Worker

HIC – High-income country

HRH – Human Resources for Health

HSDP – Health Sector Development Programme

HSTP – Health Sector Transformation Plan

JUSH – Jimma University Specialized Hospital

LIC – Low-income country

LMIC – Low- and middle-income country

MDG – Millennium Development Goal

OECD – Organisation for Economic Co-operation and Development

NHS – National Health Service

RHB – Regional Health Bureau

SAP – Structural adjustment programme

SDG – Sustainable Development Goal

SWAp – Sector Wide Approaches

TPLF – Tigrayan People's Liberation Front

UHC – Universal Health Care

WHO – World Health Organisation

Introduction

Brain drain, sometimes referred to as human capital flight, is recognised as a major development challenge for low- and middle-income countries (LMIC). Just in Africa, an estimated 70,000 skilled professionals emigrate out of the continent every year. In the African Union's Migration Policy Framework for Africa and its Plan of Action for 2018-2027, brain drain is recognised as detrimental "on the economies of the States of origin countries by hampering growth and development of industries and service sectors where highly skilled nationals are needed" (African Union Commission 2018, 39). Brain drain is becoming a dominant form of international migration (Docquier and Rapoport 2012).

Brain drain is particularly pronounced in the health sector. Dodani and LaPorte (2005, 487) define the phenomenon as "the migration of health personnel in search of the better standard of living and quality of life, higher salaries, access to advanced technology and more stable political conditions in different places worldwide." The migration of health workers affects the health system of the country they leave behind by aggravating health worker shortages (Brock and Blake 2017; Zimbudzi 2013). Moreover, an additional challenge to the health system is the emigration of public health specialists and scientists. Not only do the countries of origin experience economic loss when health workers and other adjacent professional groups who have been trained on the government's expenses leave, but the destination countries also do not have to provide for example medical training to doctors who pass their licensing examinations (Mills et al. 2011; Mackey and Liang 2013). In this way, LMICs subsidise high-income countries (HIC) (Birn, Pillay, and Holtz 2017). The negative effects of brain drain are exacerbated by *internal* migration and other exits from the health workforce due to various causes, including illness, death, retirement, or leaving for other sectors. Those who leave are then often either replaced by professionals with less work experience or not replaced at all (Koussa et al. 2016; Lopes et al. 2017).

Brain drain in the health sector is a significant challenge to the functioning of national health systems because it is a major driver of shortages of human resources for health (HRH). Without a health workforce, there are no health services (Campbell et al. 2014; Haileamlak 2018; WHO 2006b). The World Health Organisation (WHO) and the World Bank have projected that there will be an 18 million health worker shortfall by

2030 (WHO 2016a). These shortages will disproportionally affect LMICs due to the uneven distribution of health workers across the world: 90% of low-income countries (LICs) have less than 10 medical doctors per 10,000 people, whereas only 5% of high-income countries have the same low amount (WHO 2019). In 2018 there were for example 4.78 physicians and 18.22 nurses and midwifery personnel per 1,000 population in Norway, compared to 0.08 physicians and 0.71 nurses per 1,000 population in Ethiopia (WHO n.d.-a). Sub-Saharan Africa alone experiences 25% of the global burden of disease, however, only 4% of the world's health care workers reside there (WHO 2006b). When facing health crises such as the AIDS epidemic or the Covid-19 pandemic, an eroded health workforce contributes to placing a heavier workload on an already overworked workforce. The current pandemic has illustrated how crucial health workers are for the functioning of health systems.

Solving the health worker shortage problem has been on the global policy agenda for decades. It was recognised as highly consequential to reaching the Millennium Development Goals (MDG) and the Sustainable Development Goals (SDG) that followed, which recommends 4.45 skilled health workers (physicians, nurses, and midwives) per 1,000 population (WHO 2016b). Medical brain drain, and the loss of knowledge and capacity that it entails, threatens the achievement of major global goals, especially SDG 3 on good health for all people and universal health coverage. Addressing brain drain in the health sector is consequently necessary to achieve the global health goals enshrined within the SDGs. SDG 3 aims to "ensure healthy lives and promote wellbeing for all at all ages," including the equitable distribution of and access to health services across the world (WHO n.d.-c). One important step to achieving this can be found in SDG target 3.8, which aims to achieve universal health coverage (UHC) for all. UHC, "that all people have access to the health services they need, when and where they need them, without financial hardship," (WHO n.d.-d) will be unobtainable if poor countries continue to be drained of HRH through brain drain.

I.   Ethiopia's brain drain challenge

In this thesis, I will examine medical brain drain as it plays out in Ethiopia. The country struggles with the retention and motivation of its health workers at all levels of the health system, and it is one of the countries that have been hit the hardest by medical

brain (Adovor et al. 2021; Okeke 2014). Internal migration from rural to urban areas aggravates the problem and creates an unequal distribution between and within regions.

Ethiopian health worker density is five times lower than the 4.45 SDG threshold, sitting at 0.96 physicians, health officers (an Ethiopian mid-level health worker), nurses and midwives per 1,000 people. In comparison, the African continent as a whole has a 2.2 health worker density (Haileamlak 2018). Despite taking steps to increase the health workforce, such as through a scaling up of medical education, emigration continues to impact upon the health worker shortage. Feysia et al. (2012) found that while turnover and attrition from the public health service has been limited within the three to four first years after graduation, it occurs significantly in the years after this, largely due to emigration. Attrition is defined as the reduction in staff numbers for various reasons, where departing staff are not replaced. In the first years after graduation, Ethiopian health staff, such as physicians and nurses, whose education the government sponsored, generally have to serve a compulsory duty period for a period following graduation to "pay back" the government for their education.

Between 1997 and 2015, the Ethiopian government, under the rule of the Ethiopian People's Revolutionary Democratic Front (EPRDF), undertook four Health Sector Development Programmes (HSDP). Two main prioritisations in these programmes were human resource reform and primary health care, ensuring a higher number of and better educated heath care professionals and community workers to cover a larger part of the population (Alebachew and Waddington 2015). Recently, a new programme was undertaken, the Health Sector Transformation Plan (HSTP), running from 2015 to 2020, which continued to scale up the number of health workers at all levels in the health system, from community health workers to physicians. Since the early 2000s, there has been a substantial expansion of health service provision, underpinned by a recognition that health workers are the backbone of the health system.

Consequently, Ethiopians' health status has improved on several indicators over the last decades. However, there are still major health concerns: communicable diseases; maternal, childhood and nutritional conditions; non-communicable disease; injuries; and public health emergencies remain widespread (Habtemariam and Semegn 2018). The Ministry of Health has identified high attrition and turnover rates and inadequate motivation of the health workers as weaknesses within the health sector (Ministry of Health 2015). When it comes to turnover, those who leave are replaced,

unlike in attrition, although they often are replaced by people of lower skill, resulting in a knowledge gap. However, strategic and holistic HRH planning has largely been overlooked, and instead the projection of staff numbers has been the main policy focus. A lack of long-term policies and strategic planning when it comes to HRH have led to a narrow focus on increasing the number of health workers, rather than addressing underlying reasons for medical brain drain (Haileamlak 2018).

Studies have found that between 50-60% of health professionals in Ethiopia have intentions to leave their job, although not necessarily for abroad (Kalifa, Ololo, and Tafese 2016; Abera, Yitayal, and Gebreslassie 2014; Asegid, Belachew, and Yimam 2014; Ferede et al. 2018; Getie, Betre, and Hareri 2015). Studies on the career plans of medical students have found that few plan to work in rural areas, and that 50-60% hope to find employment abroad (Johansson 2014; Assefa et al. 2017a; Deressa and Azazh 2012). However, only a few studies involved a qualitative component in addition to a quantitative survey (Asegid, Belachew, and Yimam 2014; Kalifa, Ololo, and Tafese 2016; Gesesew et al. 2016), and a few studies pay attention to the voice of the health workers themselves; those who work within a health system weakened by high levels of brain drain. This thesis addresses this gap in the literature.

II.   Aims and research questions

This thesis aims to contribute to an understanding of how brain drain influence the health care workers and the health system in Ethiopia. To this end, I ask:

1) How do brain drain impact upon Ethiopia's public health system?
    a. How do the remaining health care workers experience the impacts of brain drain?

This thesis is based on a qualitative study, focusing on accounts of how public health workers who work in Jimma University Specialised Hospital (JUSH) experience these issues. The problem has been recognised by the government, and I therefore also ask:

2) What policy solutions exist to address brain drain in the Ethiopian health sector?

III.   Thesis outline

The first chapter of this thesis reviews the literature on medical brain drain internationally. I first outline the global HRH crisis as the wider context that health worker migration exists within. Second, I give special attention to the ethical debate surrounding the topic. Last, I summarise the effects of brain drain, with attention to economic and societal effects and the effects on the health system in sending countries.

Following this, chapter 2 outlines the theoretical and methodological approach of this thesis.

In chapter 3, I outline the Ethiopian health system. I situate Ethiopia's HRH challenges within Ethiopia's broader political context and health policy history. Here, I explain the historical political developments that have shaped the way Ethiopia deals with public services in general and health service delivery in particular. In chapter 4, I review the literature on health worker migration and turnover in Ethiopia and I describe the scope of the HRH challenges and medical brain drain. I also examine Ethiopian policy solutions to the retention of health workers, and I outline the local retention strategies at JUSH, where I conducted my fieldwork.

From chapter 5, I begin the analysis of the health care workers' accounts. Here I discuss the push, pull, and stay factors that are related to why people leave or stay through juxtaposing global trends with the perceptions and experiences of the respondents in this study. Chapter 6 discusses health care workers' perspectives on the consequences of brain drain on the Ethiopian health system and on their working conditions. In chapter 7, I consider the respondents' perceptions of both the local and the national retention strategies and policies.

Chapter 8 concludes by summarising the findings and suggesting future research for policy improvement.

Chapter 1: Background: brain drain in the global context

Skilled professional emigration – or brain drain – is not a recent phenomenon. It was first recognised internationally in the 1960s, and since then the issue has been a contentious part of the development debate (Carrington and Detragiache 1998). Although also present among many other professional groups, medical brain drain has perhaps been given the most attention in the literature as it has potential consequences for the ability of LMICs to provide even basic health services to their populations.

In this chapter, I present the issue of medical brain drain in the international context. I begin by outlining the overarching problem of the HRH crisis, which is exacerbated by medical brain drain. Next, I give a brief overview of the ethical discussion which surrounds brain drain, before I review the literature on the effects of brain drain on the sending and destination countries.

1.1   The international context: a global HRH crisis

The WHO has calculated that the world needs to produce around 40 million health and social care jobs by 2030 in order to meet the global health needs. Simultaneously, they also expect that there will be a gap of 18 million health workers worldwide by the same year. The greatest impact of this gap will be felt in LMICs. Using the 4.45 health worker density threshold to measure the amount of personnel that is necessary to meet the world's health needs, the WHO estimates that in Africa alone, the shortage may increase from 4.2 million health workers in 2013 to 6.1 million in 2030 if the current trends continue (WHO 2016a).

The development challenge found in the lack of health workers in LICs was recognised in the Alma Ata Declaration of 1978, which, among other things, states that "primary health care relies, at local and referral levels, on health workers […]" (WHO 1978). In the 1980s and 1990s, the issue was considered in the broader discussions of structural adjustment, which limited states' ability to develop and spend money on public health services, such as health and education (Fieno et al. 2016). In the 2000s, the issue of HRH was again put on the global agenda, when, among other things, the *World Health Report* of 2006 stated that the health workforce is the central factor in advancing health (WHO 2006b). Donor agencies consequently became concerned with increasing the production of health workers (Fieno et al. 2016). The health workforce is

also recognised as key to attain UHC within the wider framework of the SDGs. However, the WHO contends that the availability of health workers is not enough; they need to be equitably distributed and accessible, competent, motivated, and empowered to provide health care (WHO 2016a). The internal distribution of health workers also remains a problem in many countries with a high health worker density (Fieno et al. 2016). In Norway, for example, where the health worker density is among the highest in the world, rural municipalities struggle to recruit physicians, and 3 out of 4 municipalities report difficulties in recruiting nurses (Abelsen, Gaski, and Fosse 2020).

A common policy response to the HRH crisis has been the increase in training of personnel – both in international fora and in different national contexts, like in Ethiopia. However, this ignores the many other factors that contribute to the crisis. Additionally, policies need to account for, for example, the availability of health personnel and their distribution, the market-based demand for health workers determined by national budgets and population health needs (Herbst et al. 2016), or for health worker emigration. This gap between supply and demand is caused by several factors. The most visible factor – and the reason for the policy prioritisation of increased training of health personnel – is the supply issue, which is characterised by an endless shortage of skilled health workers, due both to poor workforce planning and underinvestment in education and planning. This problem is further exacerbated by the unequal distribution of health workers within countries, often because health workers are unwilling to work in remote or under-served areas. Moreover, training more health personnel is futile as long as there is a shortage of new jobs due to the insufficient budgets for salaries. Another issue is the poor working conditions within the health service and the often heavy workload, which may cause health workers to leave the health sector or to leave the country (WHO 2016a). Many LMICS experience both economic demand-based shortage and supply-based shortage (Szabo et al. 2020), coupled with medical brain drain.

Brain drain contributes to the persistence of the global health worker crisis, particularly in LMICs, and to the global workforce imbalance. Medical professionals are a well-represented group within international migration, as the combination of serious labour shortages within the medical sector and their highly sought-after skills allow them to be highly mobile (Botezat and Ramos 2020). In a study on medical and nursing students' intentions to work abroad or in rural areas, Silvestri et al. (2014)

found that 26% of the medical students and 33% of the nursing students asked in sub-Saharan Africa were anticipating international careers.

1.1.1 The international response to medical brain drain

In 2010, the World Health Assembly, the forum through which WHO is governed by its member states, adopted the Global Code of Practice on the International Recruitment of Health Personnel, hereafter referred to as the Code. The Code aims to "mitigate the negative effects and maximise the positive effects of migration on the health systems of the source countries," and it encourages bilateral and multilateral cooperation to support the goals. It provides guidelines on how to ensure ethical recruitment practices; health workforce development and health systems sustainability; data gathering and research; and information exchange between the member states. International cooperation and technical and financial assistance from HICs are encouraged (WHO 2010).

The adoption of the Code is voluntary, however. Its effectiveness is limited by the many stakeholders who have to adopt and enforce it, such as member states, private sector actors, and others, whose self-interests give rise to conflicting demands. Moreover, it does not ensure accountability for the receiving countries; its voluntary nature means that it is unable to effectively address global HRH imbalances through enforcement mechanisms (Mackey and Liang 2012), and it does not touch upon the issue of financial compensation to the countries of origin (Birn, Pillay, and Holtz 2017). The Code also presents ambiguous guidelines; it never defines "international recruitment," and while it discourages "active recruitment," it never specifies its meaning. Its assertion that HICs can recruit health workers from LMICs without violating the Code, as long as the recruitment is "ethical" – which it never defines – has been critiqued as being limiting to its effectiveness (Tankwanchi, Vermund, and Perkins 2014). Kollar and Buyx (2013) point out that generally the effects of voluntary codes on ethical commitment has been ambivalent (see also Connell and Buchan 2011; Blacklock et al. 2012). Furthermore, as the financial crisis hit Europe and the US, funding for the WHO and other relevant actors were reduced, which meant that continued work to implement the Code became weakened (Van de Pas et al. 2016).

1.2   Ethical considerations of brain drain

The operation of public health systems is dependent on the existence of a large and motivated health workforce. Health worker shortage lead to high workloads for the existing staff, increases the error rate in diagnosis and interventions, as well as obstructing countries' capacity to implement interventions meant to improve health outcomes (Médicins Sans Frontières 2007; Dal Poz et al. 2009). To improve health outcomes, health workers are crucial; it has been found that the lack of skilled health workers impede the implementation of health interventions that can improve population health drastically, such as efforts to improve maternal and child health or addressing communicable diseases such as HIV/AIDS, malaria, or tuberculosis (Dreesch et al. 2005; Gupta et al. 2011; Lassi et al. 2016; Mackey and Liang 2013; Kollar and Buyx 2013). Consequently, a discussion on the ethics of health worker migration is constantly ongoing. Some of the central topics to the debate deal with the effects of medical brain drain on the country of origin and on the destination country, the moral implications of brain drain, as well as the right of health workers to migrate.

Many hold that the emigration of health workers is problematic. Kollar and Buyx (2013, 3) sees the emigration of health workers from poor countries to rich countries as "a symptom of the underlying gross inequalities between rich and poor countries, which are a problem of global injustice" (also see Oshotse 2019). Considering that the importing countries mainly are HICs, such as Australia, Canada, the UK, and the US,[1] and the exporting countries are LMICs who struggle to provide adequate health services to their populations (Nair and Webster 2013; Birn, Pillay, and Holtz 2017), several authors contend that the emigration of health workers increases global inequalities past the shortage of HRH, and there is agreement that medical brain drain undermines the development of efficient health systems in LMICs (Brock 2009; Aluttis, Bishaw, and Frank 2014; Hooper 2008; Brock 2016; Yuksekdag 2019; Mackey and Liang 2012). It is important to note that medical brain drain also happens between more affluent countries. Within Europe, for example, there is a flow of physicians from east to west, with Romania and Poland, especially, experiencing very high emigration rates. Many of the more recently emerging destination countries include Germany,

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[1] Australia, Canada, the UK, and the US are the top four countries that employ physicians who have been trained in other countries; around a quarter of their workforce are made up of international medical graduates, with the majority of these from countries in the lower-income bracket (Duvivier, Burch, and Boulet 2017).

France, Norway, Sweden, and Switzerland (Adovor et al. 2021). Also here the movement is towards wealth centres.

Groenhout (2012) contends that this demonstrates one of the ways in which the global wealth centres exploit the peripheries. Similarly, Hooper (2008, 686) argues that wealthy countries that benefit from medical brain drain "should stop the poaching and begin to rebuild health care systems for those countries we have helped to devastate." Mackey and Liang (2012, 72-73) argue for a reallocation of resources that sees HICs compensating "resource-poor countries for the immense cost and harm caused by health care brain drain." This is echoed by Mills et al. (2008), who contend that clear regulation, followed up by enforcement, is needed to stop recruitment agencies from recruiting health workers from countries with vulnerable health systems, and the recipient countries need to compensate the sending countries. Active recruitment policies in HICs for health workers from LMICs have augmented the unequal distribution, although active recruitment practices are not as widespread as they used to be. Active recruitment is criticised in the 2010 Code (WHO 2010); however, as discussed above, the Code is limited in its effectiveness. Oshotse (2019) points out that many HICs have changed to passive recruitment policies, in which the emigration process for health workers (and other desirable workers) are made easier. For example, possessing an education makes legal international migration easier than for uneducated individuals (Adams 2003).

Although many countries are moving towards more ethical recruitment practices, the health workforce of many countries have been bolstered by international recruitment. For example, the National Health Service (NHS) in the UK has for many years had an active recruitment strategy of foreign health workers, including many from LMICs (Pond and McPake 2006). However, while more recent recruitment policies aims to scale up international recruitment, the aim is to recruit from "countries from whom it is ethical to recruit" and to train more health workers domestically (NHS 2019, 84). While it is likely that "ethical" refers to the Code, ethical is never defined in the NHS strategy and the Code is never mentioned – mirroring the ambiguity of the Code itself. Most of the health workers remain British, although the percentage of workers from the UK has fallen slightly between 2009 and 2020, and workers from the EU make up the largest share of foreign workers (Baker 2020). At the same time, evidence suggests that the Organisation for Economic Co-operation and Development (OECD)

countries' reliance on foreign health workers, including those from sub-Saharan Africa, remains strong and in some cases has even increased (Dhillon 2015).

Between 2005 and 2015, the outflow of African-trained physicians to the US increased by 27.1%, of which most were Africans and not foreigners who had trained on the continent. There was an over 300% increase in physician graduates in this period, however (Duvivier, Burch, and Boulet 2017). In the last decade, the number of foreign-born health workers in OECD countries have risen by around 20%. However, a proportion of these moved to their destination country prior to entering education. One in six doctors in OECD countries were trained abroad, which is an increase from 1 in 7 ten years previous to this 2019 report, granted some of these are born in the country they return to and have only studied abroad (OECD 2019). This is common among Norwegian medical students, for example, as Norway does not educate enough physicians in Norway to cover the population needs. In Europe, many countries rely on foreign-trained physicians and nurses, although the share of foreign-trained doctors trained in LMICs in 2018 was very low. However, in Ireland and the UK the share was over 50%, and in Germany and France it was over 15%. The proportion of foreign-trained nurses trained in LMICs was low in most places except for in the UK, where just over one-third who trained abroad were trained in an LMIC (Williams et al. 2020). Still, it is evident that the international migration of health workers continues and that the Code may have limited effects, especially in the countries that have been the most attractive destinations for many health staff. To this regard, Birn, Pillay, and Holtz (2017, 512) argue that poorer countries essentially subsidise richer countries, and "LICs have in fact been 'donors' of health aid rather than recipients [...]." Since the 2006 *World Health Report*, which drew attention to the HRH crisis, the global health worker gap has increased (Van de Pas et al. 2016).

Some academics argue that health workers have a moral responsibility to their home countries. Brock (2016) argues that health workers who emigrate have a moral duty to contribute to the state that trained them and that they need to compensate their government for their training. Brassington (2012) focuses on how health professionals benefit from a range of public goods, such as their education. While he finds that health professionals may have some obligation to work to pay back the state for the resources spent on training them, the problem lies not on the person who chooses to emigrate. Instead, he, like Birn, Pillay, and Holtz (2017), points out that brain drain keeps the cost

of creating experts in the sending countries, while the (often rich) receiving countries reap the benefits. Ultimately, he hypothesises that the possible moral problem lies in "the privatisation of public goods and expropriation of the benefit that those goods would generate beyond a level that is deemed acceptable" (Brassington 2012, 120). On the other hand, Hidalgo (2013) argues that if health workers have a duty of reciprocity, they do not have the moral duties to repay the present net value of the public investment of their education and training. He argues that it is neither unethical to recruit health professionals from LMICs nor unethical for health workers to emigrate. In Hidalgo's view, the only duty they have is "to bear a fair share of the costs of their education and training" (Hidalgo 2013, 608).

Kollar (2012) shifts the argument towards human rights, particularly the right to basic health care, and argues that medical brain drain is morally wrong because it ultimately denies people this right. Similarly, Ferracioli and de Lora (2015) argue that health workers' duty of reciprocity to the state that trained them lies not in the loss of financial investment in their training but in the high risk they pose to patients during their training and the actual harm they do in the process of becoming licensed practitioners. Consequently, they have a moral duty to repay the people who had to participate in their training.

In summarising these issues, Kollar and Buyx (2013) bring up one of the most crucial ethical considerations in this debate: the question of health workers' right to freedom of movement. Considering the many who argue that health professionals have a moral duty to stay in their country, there is seemingly wide agreement that health workers' right to movement is somewhat restricted in comparison to other professional groups. In reviewing the literature, it becomes evident that few – if any – argue that health workers have to stay in their home countries forever. However, as Groenhout (2012) points out, a period of compulsory service post medical school ideally results in a significant number of health professionals who then choose to stay after the service is completed. Kollar and Buyx (2013); Brassington (2012); Brock (2009, 2016); Ferracioli and de Lora (2015) all provide arguments for enforcing such a period of service, with Brock also proposing an alternative in form of taxation. Ferracioli and de Lora (2015) provide an exception to their argument of the moral obligation of serving their country in cases where medical professionals are either denied their basic human rights or where they are forced to compromise their moral integrity by for example being forced to

participate in executions, likening these professionals who emigrate to political refugees.

In *Debating Brain Drain,* Brock and Blake (2015) debate back and forth. Brock is clear in her support of short periods of compulsory service or taxation, whereas Blake argues that restricting health professionals' ability to emigrate is both unfair and illiberal. However, when presented with Brock's argument that these professionals should be made aware of the condition of compulsory service or taxation previous to starting their education, Blake seems to accept this policy tool as well. Citing the UN Declaration of Human Rights, Mills et al. (2008) are more clear in their view that while everyone has a right to health, health workers, like any other person, should have the right to choose where they live and work. Likewise, Sager (2014) questions the moral (and the practical) concerns of restricting the movement of skilled migrants, and posits that the moral responsibility to provide health services does not rest solely on the possible emigrants.

As becomes evident from the literature, two lines of thought – although often intermixed – emerge: it is the sending country's responsibility to enact efficient policy that retains its health professionals on the one hand, and the responsibility of receiving countries to not recruit health workers – including passive recruitment – from LMICs on the other. In the middle of this, the moral duty of the health workers is endlessly debated, although few consult the health professionals themselves. This thesis helps to address this gap.

1.3   Economic effects of medical brain drain

The debate on medical brain drain in an international perspective also deals with the issues of the effects of brain drain, both beneficial and detrimental. In 1960, Schultz (1961) presented his theory of human capital, which argues that there is a direct link between investment in education and increase in income, at both the individual and national levels, as education increases productivity. If applied to brain drain, the theory indicates a bleak outcome for the sending countries when a significant proportion of a country's educated workforce leaves, and a much brighter result for the receiving countries who as a consequence receive more educated workers than they are able or willing to produce themselves. Docquier and Rapoport (2012, 725) contend that this

augments the inequality between countries as it makes "human capital scarcer where it is already scarce and more abundant where it is already abundant."

While some of the literature outlines the positive economic aspects of brain drain from LMICs to HICs, such as remittances, much of the literature agrees that brain drain primarily impacts LMICs negatively. Dealing first with the positive, Gibson and McKenzie (2012) conducted a microeconomic study in five countries on the economic effects of brain drain on the sending country and found evidence that suggests that the migration of highly skilled people lead to an increase in the living standards of people from countries that experience high levels of migration. Adams (2003) contends that remittances are critical to the foreign exchange position of the sending countries. Moreover, they are crucial to the consumption and investment behaviour of the migrant households. Clemens (2011) argues that in the case of African physicians, the net effects of brain drain are positive as most have spent enough time in their country of origin prior to emigrating to effectively pay back what their education cost, and after emigrating they contribute to the economy of their home country through remittances. However, the purely economic perspective that he presents leaves out the societal effects of the experienced people leaving – which in cases such as Ethiopia is aggravated by turnover from the public health system and rural-urban migration. Hidalgo (2013) argues that health professionals who emigrate can repay their debts to society incurred from their education through remittances, which he states help generate tax revenue and consequently affects the economy positively.

In a reply to Hidalgo, Hooper (2013) agrees that remittances partially compensate for the negative economic effects of brain drain, but questions whether they are enough to fully compensate for the financial loss. Moreover, he points out that remittances generally are sent to the families of the person who has emigrated, while health education generally is provided through public subsidies. In this way, remittances may in reality exacerbate inequalities within society. Also replying to Hidalgo, Brock (2013) argues that while remittances have positive features, they also have several downsides, including repressive effects:

> Typically helping families of the better off, they often do little to relieve the suffering of the worst off, frequently exacerbate the widening inequalities which worsens the position of the most vulnerable, create dependence, excuse local governments from making necessary reforms to create the kinds of reforms necessary to keep

citizens, trail off after a period of 5 years, and most importantly, do little to address structural causes of poverty or remedy poor institutional environments. (Brock 2013, 613)

Brock also draws attention to other negative economic effects of brain drain, such as losses of revenue, lower likelihood of more progressive taxation, and that the poorer segment of the population must continue to finance key public goods. Like in the human capital theory, she also states that the departure of the highly skilled reduces income levels and slows the growth rates for those who remain. According to Docquier and Rapoport (2004), it is doubtful if remittances (or other ways emigrants impact their home country's economy) is enough to counteract the negative economic effects of brain drain. In Ethiopia, Beyene (2014) found that remittance recipients had higher consumption than non-recipients even without the remittances, which indicates that those who are more affluent are more likely to leave than those who are poor. This is also found on a country level, where countries with a higher relative gross national income are more likely to experience health worker emigration than very poor countries (Arah, Ogbu, and Okele 2008). Beyene (2014) also found that remittances increased the consumption gap between the recipient and non-recipient groups further. For the recipients, poverty levels fell, which caused the overall poverty level to fall, albeit modestly. Generally, as Yuksekdag (2012) notes, because remittances largely are used for personal needs, their developmental effect is disputable. Lowell and Findlay (2002) found that increased remittances did not contribute to economic growth in India or Mexico, and that remittance flows had a minimal and unreliable effect on the Jamaican economy.

While the above review suggests modest positive economic effects of brain drain – at least for some – Mills et al. (2011) estimate that the overall loss of returns from the investment in the education of physicians working abroad in nine sub-Saharan African countries is USD 2.17 billion, ranging from USD 2.16 million in Malawi to USD 1.41 billion in South Africa. In Ethiopia, they estimated that the loss of returns was USD 24.64 million. To find what these numbers would be today, an updated study is necessary. Desai, Kapur, and McHale (2003) looked at the financial impact of skilled emigration by studying Indian-born immigrants in the US. They present evidence that despite skilled emigrants only making up a small proportion of the Indian population, the negative fiscal effects are still significant. Docquier (2014) argues that in the poor sending countries, overall, evidence shows that there likely are more losers than

winners. However, he finds that there in many countries is an "optimal" brain drain rate to ensure income-maximisation (at around 10% of the total of highly educated workers), and that enforcing too many restrictions on brain drain is unfavourable. On the other hand, he also finds that the optimal level is exceeded in most LMICs.

1.4 The effects of medical brain drain on health outcomes and the health sector

While the HRH crisis has more serious repercussions in LMICs, HICs also require more health workers. This is largely due to demographic shifts, such as the ageing of the population in these countries (Dodani and LaPorte 2005). While some, like Hidalgo (2013), argue that empirical evidence sows doubt about the extent to which health worker migration poses a risk to health outcomes in their countries of origin, many others seem to be of the opposite opinion. In their replies to Hidalgo, Brock (2013) and Hooper (2013) question his reading of the evidence, and both draw attention to the lack of consensus about the net effect of medical brain drain on poor sending countries. Hooper (2013) points out that the argument that migration benefits the sending countries is undermined by studies that suggest that the migration of health professionals has harmful effects on health outcomes in these countries. And as he further argues:

> If lacking access to sufficient health care workers did not significantly harm patients, it is unclear why countries in the developed world would be so keen to actively recruit workers from poorer countries to plug their own human resource deficits. (Hooper 2013, 611)

For example, the impact of brain drain can be felt in resource-poor countries' ability to fight epidemics and pandemics (Birn, Pillay, and Holtz 2017). Bärnighausen, Bloom, and Humair (2007) and Bhargava and Docquier (2008) find that HRH shortages, aggravated by brain drain and attrition, lead to difficulties in dealing with the HIV/AIDS epidemic. High workloads and dangerous work environments due to the fear of transmission causes health workers to leave, which increases the workload for the remaining workers and decreases the ability of the health system to prevent further spread of an epidemic or to address inadequate treatment of patients. It also takes away resources that could be used on other health concerns (Mackey and Liang 2012). Another example is the Ebola epidemic in West Africa in 2014-2015. If half the

Liberian physicians registered in the US had returned to their country of origin, it would have more than doubled the physician workforce in the country (Tankwanchi, Vermund, and Perkins 2015). The Ebola epidemic demonstrated the vulnerability of health systems in settings where a health workforce capable of handling an epidemic is missing (Van de Pas et al. 2016). In the 2006 *World Health Report*, it is pointed out that "when a country has a fragile health system, the loss of its workforce can bring the whole system close to collapse" (WHO 2006b, 101). This may be especially relevant during the current Covid-19 pandemic, in which an already eroded and overworked health workforce face an even heavier workload.

1.5 Societal effects of medical brain drain

Medical brain drain may also have other effects outside of the economic and on the health system. Brock (2013) states that medical brain drain weakens institutional development as those who leave often are those who might mobilise for or provide the expertise needed to build, improve, and develop institutions beneficial to development. Urban biases in the development of health systems in countries that experience high brain drain further compounds the problem in the rural areas of the countries, where few health workers remain (Misau, Al-Sadat, and Gerei 2010). Moreover, the highly educated who leave the country take with them their knowledge, which they otherwise might have imparted on their juniors. While attrition from the health workforce creates a knowledge gap within their place of work, brain drain removes the knowledge resource from the country.

Some bring up return migration as a positive effect of skilled migration, consequently not actually "draining the brain" permanently, instead bringing back more knowledge through gaining experience abroad (Hidalgo 2013; Lowell and Findlay 2002). Several observers find that on average, a minimum of 50% of skilled migrants (not only health professionals) return to their country of origin (see for example Johnson and Regets 1998; Lowell and Findlay 2002). However, nuancing the discussion, Lowell and Findlay (2002) assert that quality is perhaps more important than quantity. In places such as Bulgaria and the Philippines, only the least skilled return, and in Jamaica those who returned did so to retire. While there is insufficient data on the return of health professionals, the evidence suggests that few actually do so.

Dumont and Spielvogel (2008) also find that return rates differ across education levels and between sending and destination countries. Hidalgo (2013) implies that because 50% of physicians in the UK originally from an LMIC have said that they intend to return home means that they will do so, and generally, surveys of migrant workers indicate that many want to go home (WHO 2006b). However, as for example Walton-Roberts et al. (2017), Dodani and LaPorte (2005) and Motlhatlhedi and Nkomazana (2018) show, several factors in their home countries mean that many health professionals who desire to return do not in fact do so. Such factors include for example struggling to re-enter the public health sector, or issues of security, crime and racial tension. Moreover, factors in their destination countries may also affect how many return, such as career considerations or either new or old familial ties.

1.6   Conclusion

Medical brain drain (and internal rural-urban migration) has important implications for development. As health is a universal human right, health workers are undeniably some of the most crucial human resources a country employs, without which countries may collapse in the face of health crises. This chapter has shown that medical brain drain may also have several other detrimental effects on the sending countries. Yet, the international response to this development issue has been weak, and the international recruitment of health workers is in some countries still an important source of HRH. Sending countries are often not able to stop emigration or to ensure equal internal distribution without potentially violating the right to freedom of movement, which is another universal human right. In the rest of this thesis, I examine how these issues play out in Ethiopia.

Chapter 2: Methodological and theoretical approach

In this chapter, I outline how I developed this thesis and describe the methodology and the theoretical approach. My focus on Ethiopia's health sector as a topic came about because I got the opportunity to go to Jimma to conduct research on a health-related topic through a mobility stipend from EXCEL SMART. This is a strategic collaboration programme between the University of Oslo in Norway and Jimma University and St. Paul's Hospital Millennium Medical College in Ethiopia. The programme offered me the opportunity to conduct field research and supported me while in the field through appointing me a local mentor at Jimma University who introduced me to many of my research participants.

Through conducting an extensive literature review on public health concerns in Ethiopia, I found that an issue that seems to underpin every public health challenge is human resources for health. As mentioned, the health worker density in Ethiopia is far below the SDG goals to ensure universal UHC for all. Brain drain and attrition further exaggerate these problems, which led me to wonder how so many people leaving the public health system affects those who remain and whether the policies that attempt to tackle these problems are working.

2.1 Theoretical framework

In order to better understand why Ethiopia is struggling with such high levels of medical brain drain, I argue that it is necessary to consider the political economy of brain drain in Ethiopia. This involves examining the role of societal structures, such as political and economic practices, policies, and institutions to help understand medical brain drain as a persisting problem in the country (Fieno et al. 2016; Birn, Pillay, and Holtz 2017). It is also necessary to look at the distribution of power and resources and the developmental consequences in the context that is being studied (Reich 2019). In this regard, as Østebø, Cogburn, and Mandani argue, it is important to not consider politics only on a superficial level. Focusing solely

> on the positive relationship between political will, political commitment, and political leadership, on the one hand, and key public health outcomes on the other hand, reflects a narrow engagement with the political field and with health system governance frameworks.
> (Østebø, Cogburn, and Mandani 2018, 259)

Thus, as (Reich 2019) points out, political economy shapes policies. Consequently, understanding the historical political context is imperative to understanding the development of policies and the development of the Ethiopian health system. In this thesis, I therefore operate out from the assumption that health care policy decision-makers are influenced by the underlying political context (Ghobarah, Huth, and Russett 2004).

In applying a political economy approach to HRH and medical brain drain, the emigration of skilled workers is understood to be affected by social, political, and economic factors that are shaped by national and international processes. In a political economy approach, it becomes evident that to create efficient policies to solve the HRH shortages, a holistic approach needs to be taken. However, the commonly accepted analysis has framed the issue as a supply crisis, to be solved through the technical solution of simply training more professionals. McPake et al. (2013) highlight that generally, national approaches to solving HRH shortages have predominately relied on workforce planning – meaning the estimation of health workforce requirements based on the epidemiological and demographic profiles of the countries in question – as well as the scaling-up of the capacity to train more health professionals to reach the targeted number of workers. They argue that this attention to numbers leads to a neglect of other important critical factors that affect the human resource capacity, such as the dynamics and behaviour of the labour market, the health professionals' preferences, or historical political developments that frame policies. Policies that attempt to rectify ill health, even if they are biomedical or behaviourist in nature, are also rooted in the societal context.

2.2   Study site: Jimma University Specialised Hospital

I conducted the fieldwork over the course of three months, between September and December 2019. The study site was JUSH, which is located in Jimma in Jimma Zone in the Oromia Region in Ethiopia. Jimma is the largest urban centre in the south-western part of the Oromia region. As of the last census in Ethiopia, in 2007, the population was 120,960. Considering the rapid population growth of Ethiopia since then, it is likely that many more people live here now. However, despite being an urban centre in the region,

it is characterised by infrastructural underdevelopment, and many respondents likened it to other peripheral places.

Jimma University was founded in 1983 when the Jimma Institute of Health Science and the Jimma College of Agriculture merged, and it is today one of the most prestigious medical schools in the country (Berhan 2008). The university is the most important institution in Jimma, and it houses more than 40,000 students. It has a long history of international collaboration, going back to before the Institute and College were merged, and today it works together with partners from all over the world on different projects (Jimma University n.d.), including the University of Oslo. I conducted my fieldwork with the help of such a collaborative project. This international collaboration does not extend outside of the University and JUSH, however.

At the time of my fieldwork, Jimma University employed 2594 staff, of which 894 are clinical staff (health workers), 750 are academic staff, and 950 are administrative staff. The hospital serves a population of around 20-22 million. About five years ago, a new hospital building was constructed in order to better address the health needs of the population and its role as a teaching hospital. The new hospital has around 650 beds. I was told that the year before I conducted my fieldwork, in 2018, 50 clinical staff had left the hospital. Furthermore, a majority of the health workers in the hospital are relatively young, with most senior physicians, or specialists, aged in their 30s and early 40s.

While the respondents described JUSH as quite typical of the Ethiopian health system, there were also certain factors that seemed to be more prominent in Jimma compared to elsewhere in similar places in the country. For example, I was informed that since the 1990s, Jimma has not experienced the same level of infrastructural development as other urban centres in Ethiopia, and there is a lack of a considerable private health sector that offers dual practice opportunities. Many of the health workers came from all over the country and most had worked and studied outside of Jimma as well. In discussing their own perceptions of and experiences within the public health system, they did not limit their descriptions purely to JUSH. Consequently, while I, as the researcher, was concerned with revealing the unique features (Bryman 2016) of JUSH, I also asked questions that led to more general discussions on the public health system in Ethiopia as a whole. To this end, I draw on a number of different qualitative

methods: document review, observation, and in-depth interviews, which will be described in turn.

2.3   Qualitative method: document review

To answer what the policy responses to health worker brain drain in Ethiopia have been, I consulted documents. I used public records in the form of policy documents; however, it turned out to be problematic to gain access to all the policy documents that are mentioned in the broader literature, which necessitated the utilisation of previously published research documents to fill in the gaps. It was especially difficult to access older policy documents, such as the first two HSDPs. The policy documents I consulted the most was the HSDP IV, the HSTP, and the 2016-2025 National Human Resource for Health Strategic Plan, but other documents have also informed this research. In assessing such documents, Bryman (2016) argues that the researcher has to be aware of the context they are created within, and that they consequently are not necessarily a depiction of an objective reality but rather of the subjective reality of the policymaker. In this sense, official documents from the state are noteworthy because they may reveal something about the political and social contexts that lie beneath official policies, rather than representing social reality.

The policy documents were treated as "respondents" that I "interviewed," in accordance with the process outlined in O'Leary (2017). I "asked" the documents questions pertaining to what the responses to medical brain drain and attrition are, what the main threats are to the development of HRH in Ethiopia, and what have and have not worked in past policy documents, among other things. To understand the context and to identify the possible prejudices of the policymakers, I consulted secondary research literature on the historical and political development of Ethiopian health policy. I also noted occurrences of key words such as "brain drain," attrition," and "retention" which is the second technique for document analysis outlined by O'Leary (2017). This helped me identify the priorities within the health policy.

2.4   Qualitative method: observation

I did not use observation as a systemic data collection method. Nevertheless, this study has been informed by my observations while in the field. As I was showed around and

spent time in the hospital, I gained an understanding of the working conditions and other issues that the respondents talked about. Likewise, living in Jimma during the field work helped me contextualise all the information I was given in the interviews and everything I have read about Ethiopia. When I later moved to Addis Ababa, I was better able to understand especially the respondents' views on moving to the capital or on the underdevelopment of Jimma. Finally, a field trip to two remote health centres where I observed working conditions, infrastructure, and access to medicines illustrated the rural-urban divide that I both have read about and that several respondents brought up in the interviews. This field trip also served to illustrate the accounts of the respondents who had worked under such conditions.

2.5   Qualitative method: semi-structured interviews

To explore the depth and complexities of the health workers perceptions and experiences, I found taking a qualitative approach to be most appropriate. Assessing how different people understand the same situation offers insight into how the social processes and the overarching system that they work within functions, as well as the effects of this system on the chosen population (O'Leary 2017; Byrne 2018). Byrne (2018) argues that qualitative interviews are advantageous in that they allow for a flexible approach to research topics. Interviews on sensitive topics or on topics which respondents are reluctant to talk about can be sensitively approached to gain a deeper understanding of the respondents' experiences. Furthermore, I selected semi-structured interviews rather than unstructured interviews in order to more easily be able to compare the respondents' perceptions and experiences while still being able to ask follow-up questions and dig deeper in the case of new themes emerging (Bryman 2016).

2.5.1   Selection of respondents

While an aim of this study is to say something about the perceptions and experiences of health staff within the public health system of Ethiopia, the research was limited to one geographical area (JUSH). The population is therefore the health workers of this hospital. The administrative support staff (non-technical) were also included to gain a better overview of the functioning of the hospital and staff's working conditions.

To ensure a wide range of opinions and experiences of the respondents, I chose a purposive non-probability sampling approach. I was interested in interviewing people in different positions in the hospital (technical administrative staff, support administrative staff, specialist physicians, residents, nurses, etc.) to compare their experiences. I was concerned with interviewing health staff from different departments and of different genders to ascertain if these factors had an effect on their perceptions and experiences. Through the help of my mentor in Jimma – an internist and a professor of medicine who had previously been the Chief Executive Director (CED) of the hospital, who was concerned with introducing me to a variety of people with different perspectives – I therefore created a sample with maximum variation. I was also introduced to a few respondents through a medical student from the University of Oslo who previously had visited Jimma with the help of EXCEL SMART. I followed up with snowball sampling (Seale 2018; Bryman 2016). This was to include respondents that were both from different networks and to branch out from people my mentor knew. The sample was limited to people who spoke English. This restricted my access to some professional groups, such as nurses, but was not a problem among physicians, whose education is in English.

One possible limitation may have been that I was introduced to people who loved being a health professional, or the people who agreed to an interview felt like the research was relevant to them. This is similar to non-response sampling biases, which may exaggerate the prevalence of some opinions (Robinson and Seale 2018). However, as the aim of this study is to find the perceptions and experiences of health workers with brain drain, this may not have had a great consequence for the findings as those who have few opinions on this topic likely would bring little of importance to the research.

I interviewed 25 people. To represent medical professionals, five nurses, 16 physicians (nine specialists and seven residents), and one anaesthetist were interviewed. Health professionals working in surgery, ophthalmology, paediatrics, internal medicine, obstetric gynaecology and urogynaecology, midwifery, and orthopaedics and traumatology were represented. The health workers I interviewed were relatively young. Three of the respondents were aged 40. Most of the specialists were in their early to mid-30s. The residents were in their late 20s and early 30s. Among the administrative support staff, I interviewed the Chief Admin and Development Director, Human Resource Director, and the head of Procurement and Property, who had previously been

the head of laboratory. In a hospital as large as JUSH, this means that there were some groups that were not included in this study, such as psychiatrists and radiologists, and the snowball sampling means that some groups are represented more than once in different capacities.

2.5.2 Formal requisites

This research project was registered with the Norwegian Centre for Research Data (NSD) and approved by Jimma University's ethics committee. I developed the consent form information about the project and the respondents' rights (see Appendix B). All respondents consented to participate in an interview, including being recorded, having the interviews transcribed, analysed, and discussed in the final thesis. Some respondents were reluctant to or refused to tick the box on the consent form that would allow me to publish information about them in a way that they can be recognised, which means I am unable to mention their position or write about anything they said that makes them recognisable. These respondents were promised complete anonymity. I also assured them that none of their opinions or critiques will be published alongside their position. All respondents were informed that participation is voluntary and that their consent can be retracted at any time, and they were given the sheet with my contact information. I recorded the interviews with a recorder rather than a phone to ensure data protection. Instead of using their names, all respondents were given a number under which their interviews were saved.

2.5.3 Data collection: interviewing the respondents

While I often struggled to get people to reply to my request for an interview (everyone who answered me agreed to participate), once I had gotten a positive response, we organised a time and place for the interview according to the respondent's schedule. All except one of the interviews were conducted at Jimma University or in JUSH, whereas the last interview was conducted in a meeting room in the hotel where I was staying. All of the specialists as well as the nurses and some of the residents were interviewed in their offices, while almost all of the residents were interviewed in an office I had borrowed for the purpose or in a library in the hospital.

I used semi-structured interview guides (see Appendix A), amended following feedback through my application for project protocol and ethical clearance from Jimma University. I created one interview guide for health staff and one for administrative support staff and policy makers, which was later amended to be specific to the HR director of the hospital. I was unable to pilot my interview guides beforehand due to my lack of access to the field prior to arriving there; however, I undertook minor amendments to the guides during the interview process.

During the first interviews, I followed the interview guide quite closely. As my interviewing skills developed and I became more familiar with both the research topic (such as the functioning of the hospital and the medical education) and the cultural nuances influencing the respondents' experiences, my ability to listen and ask follow-up questions improved. In order to ensure the best flow during the interview and to give the respondents my full attention, I opted to not take notes during most of the interviews; however, all the interviews were recorded, and I wrote down some brief reflections on the interviews right after conducting them.

The interview guides were divided into thematic sections and with the research questions in mind. I began the interviews with health workers by asking about background information, both to ease the start of the conversation and to generate information to be used to contextualise people's answers. I asked questions about age, job title, years in the health service, educational background, and what their job entails. In hindsight, this section would have benefited from including questions on marital status and whether or not the respondents had children, as well as asking where the respondents were from, since these things have been shown to influence the respondents' desire to leave Jimma and/or Ethiopia. This often came up naturally in the conversations, however. I then moved into a section I titled job satisfaction, which was concerned with positives, negatives, and challenges of the job, as well as pay, motivation, and professional development opportunities, among other things.

Next I asked about the respondents' future plans, including possible plans to leave the public health service. This section also contained questions about what their classmates and colleagues had done or were planning to do. The next section flowed naturally into asking questions about the effects of brain drain and attrition first on the respondent, then on the hospital and the national public health service. When I began the interview process, I included a section on whether or not respondents had noticed

any changes in who leaves and where they go over the years, however, I noticed that people either struggled to understand or had not reflected on these things, and I decided to drop these questions and instead include questions that had come up in other interviews. At this point, some respondents were beginning to grow impatient as well, and I found asking questions about things they had few opinions about to be counterproductive. Instead, I changed the guides to include a question on social barriers (gender, ethnicity, religion), which most people had not reflected upon, before moving into asking about their opinion on what the hospital and government can do to retain people, on which many respondents had a lot to say. To ensure the respondents had told me most of what they had reflected upon, I asked if they had anything else to add, after which the interviews dwindled down naturally. I ended the interviews with opening up for questions to me.

My second interview guide was similarly organised, but was directed at support administrative staff and thus more concerned with gathering information on the organisation of the hospital. As I already had a lot of interview experience by the time I used this guide, it was relatively unproblematic to use a new interview guide. This interview guide was first meant to be used more widely, but as I realised many of the administrative heads were technical staff (i.e. physicians, nurses, etc.) I found that it was not appropriate. Furthermore, as I quickly found out that all policies in Ethiopia are made by the central government, I was not able to interview any policy makers. When I in early 2020 had moved to the capital, Addis Ababa, for an internship at the Norwegian embassy, I planned to contact people from the Ministry of Health, including the Health Minister. However, due to the Covid-19 outbreak, I was not able to follow up on this.

I was worried my interview guide was too long, but I quickly found that the same interview guide could net interviews of length varying from 20 minutes to just short of an hour. Most interviews were between 30 and 40 minutes. Timewise, I had not accounted well enough for language barriers or for the fact that some of the respondents had not reflected properly upon what I was asking, which led to several interviews that were shorter than I had anticipated.

2.5.3.1 *Reflexivity and language*

A problem I encountered was when faced with respondents who did not completely trust the anonymity of the interviews. These respondents cut short discussions on politics that came up naturally in the conversations, and did not want to critique the hospital or government. While this likely was partly due to my inexperience with this method, it may also have been augmented by both a language barrier and a historical suppression of freedom of speech in Ethiopia. Local power relations may also have affected the respondents' contributions, such as those between the junior staff and senior staff or between the clinical staff and the administration (Brydon 2006). Østebø, Cogburn, and Mandani (2018) point out that when the political context of a country, like in Ethiopia, quells freedom of speech and where opposition to government ideas and policies may have serious consequences, people's answers to questions posed by researchers may be in accordance with what they believe is politically correct rather than with the truth. In this case, using a mixed methods approach including a self-completion quantitative survey might therefore have provided a more in-depth understanding of the topic, and would have allowed me to ask questions about social categories (such as ethnicity and religion) that I was not comfortable asking in person.

Before embarking on the research, I considered my position as a researcher *vis-à-vis* the respondents. Research is not an objective activity that can be removed from all aspects of politics and power (O'Leary 2017). Attributes such as gender, age, ethnicity, religion, social class, and so on have an effect both on how others perceive the researcher and on how the researcher perceive the world. An identity is often assigned to the researcher by the respondents based on these attributes. As these attributes have come to be associated with power and privilege and with disadvantage and marginalisation, the assigned identity may often be anticipated in advance (Apentiik and Parpart 2006). Reflexivity, which exposes and questions our ways of doing, then becomes an integral part of qualitative research (Corlett and Mavin 2018).

However, I did not experience many visible (to me) power imbalances when I conducted my research, nor did I become alert to any assigned identities that had a negative impact upon the interviews. My experience was that most of the respondents considered us to be on equal footing. As everyone I interviewed except for three people had finished a master's degree or higher and many do research themselves, my experience was that most of the respondents had an understanding of what research

entails. However, the power imbalance that was the most visible to me was in language. I conducted the interviews in English, and while neither my respondents nor I speak English as a first language, I have lived and studied for five years in the United Kingdom and consider myself fluent. While most of my respondents had a high level of English and were confident in their English skills, others were more uncomfortable with using English and either struggled to express themselves and understand what I was asking or were insecure in their abilities to express themselves as well as they would in Amharic, Afaan Oromoo or another Ethiopian language. Some respondents kept apologising for their English during the interview. While some of these spoke good English, their insecurity and nervousness about the language may have affected how much they talked about each topic. However, some respondents struggled more than others, and in these instances it is likely that I missed out on some important information as neither of us understood the other well enough to have a fruitful and in-depth conversation.

Because I am not a medical professional and am not familiar with the language that is used among medical professionals, and because the interview guides had not been tested beforehand, I had to find the right words to use to make my questions clear through trial and error. For example, when asking about improvisation, I found that I got more answers using the word "creativity" instead of "improvisation." Towards the end of the process, my interviewing skills had advanced to the point that this problem became insignificant, but it may have affected some replies in the beginning. Another issue was that the respondents often did not tell me that they did not understand the question. Many answered yes or no to some questions, but when prodded, I realised they had not understood. Many also talked about completely different things than what the questions asked. I chose not to use an interpreter during my interviews because I mostly interviewed physicians, whose English skills are generally very good (their education is in English), but in some cases it would definitively have been beneficial, such as when interviewing some of the administrative support staff in the hospital. It would also have been beneficial to reach more nurses. Lack of funding to pay an interpreter was also a reason why I chose not to use one. Furthermore, using an interpreter may influence the data collection and thus threaten validity as their positions within the context may be affected by invisible (to me) power relations (Kapborg and Berterö 2001; Brydon 2006). While Resch and Enzenhofer (2018) argue that there are

ways around this, as an inexperienced researcher I chose to limit my sample to those who spoke English.

2.6   Data processing: data storage, transcription, and coding

After each interview, I shortly noted down the most important themes that had come up during the interviews. I created a numerical code for each interview and named each file thereafter. Each number was paired to a name and stored separately. The interview files and transcripts were saved on my university cloud. To transcribe the interviews, I used the transcribing software F5 for Mac. All the interviews were transcribed and proofread to ensure everything was included. When transcribing, I dropped two of the interviews due to the low quality of the recording. Instead, I wrote down the most important discussions that came up in these interviews.

I then coded the interviews using the computer-assisted qualitative data analysis software NVivo in order to easily retrieve all sequences of text within a particular code and then investigate links between the themes. Using coding in the analysis may decontextualize the data from its original context and lose the narrative flow of the interviews (Bryman 2016), however, I balanced this by coding longer chunks of text in order to not lose the context. Text excerpts were also coded into several codes where relevant.

The coding process was informed by the interview guides. I based the initial codes on the questions I asked in the interviews and the notes I wrote down after each interview. I also created codes inductively based on the themes that came up in the interviews in conjunction with my extensive notes from the literature in order to off-set the risk of losing the context of the material. After going through the transcripts once, I went back through all the transcripts a second time and made sure that all the inductively created codes were considered for each interview. I also used the memo function to note down thoughts I had on connections between topics and to write down the most noteworthy quotes from the respondents.

Chapter 3: The Ethiopian health system

The Ethiopian health system is the result of a long history of political developments. To give context to the health workers' perceptions of and experiences with migration, the following chapter will first outline the organisation of the health system in Ethiopia. I will then discuss the historical political developments that lie beneath the current form of the health system. Here, I first discuss the development of service provision. I then detail how Ethiopia and the state apparatus have been organised, before I look at the state apparatus capacity. Last, I examine some international development trends and how they have impacted upon health policies in Ethiopia.

3.1   Organisation

The health care system in Ethiopia is divided into a three-tier system (see fig. 4.1). At the primary level, it is divided into rural and urban areas and based on *woreda* level, which are the third level of administrative divisions in Ethiopia, after regions and zones. In urban areas, the primary level consists of health centres that are intended to serve 40,000 people. In rural areas, the primary level is divided into primary hospitals (60,000 to 100,000 people), health centres (15,000 to 25,000 people), and health posts (3,000 to 5,000 people). These are connected to each other through a referral system. At the secondary level, there are general hospitals (1 to 1.5 million people), and at the tertiary level are the specialised hospitals (3.5 to 5 million people). Additionally, expansion of the private and NGO health sectors provides additional coverage (Ministry of Health 2010; Alebachew and Waddington 2015).

However, as I found during the fieldwork, the different levels of health care may serve many more. A nurse respondent who had previously served in a rural health centre stated that they served a population of more than 177,000 people, which is far above the 15,000 to 25,000 people that it is intended to serve. JUSH is a tertiary hospital, and its catchment population is, however, much larger than what is allotted for. I was told that it serves a population of 20-22 million, rather than the designated 3.5 to 5 million.

| Tertiary level | Specialised hospital
3.5 – 5 million people |
| Secondary level | General hospital
1 – 1.5 million people |

Rural　　　　　　　　　　　**Urban**

Primary level	Primary hospital 60,000 – 100,000	Health centre 40,000 people
	Health centre 15,000 – 25,000	
	Health post 3,000 – 5,000 people	
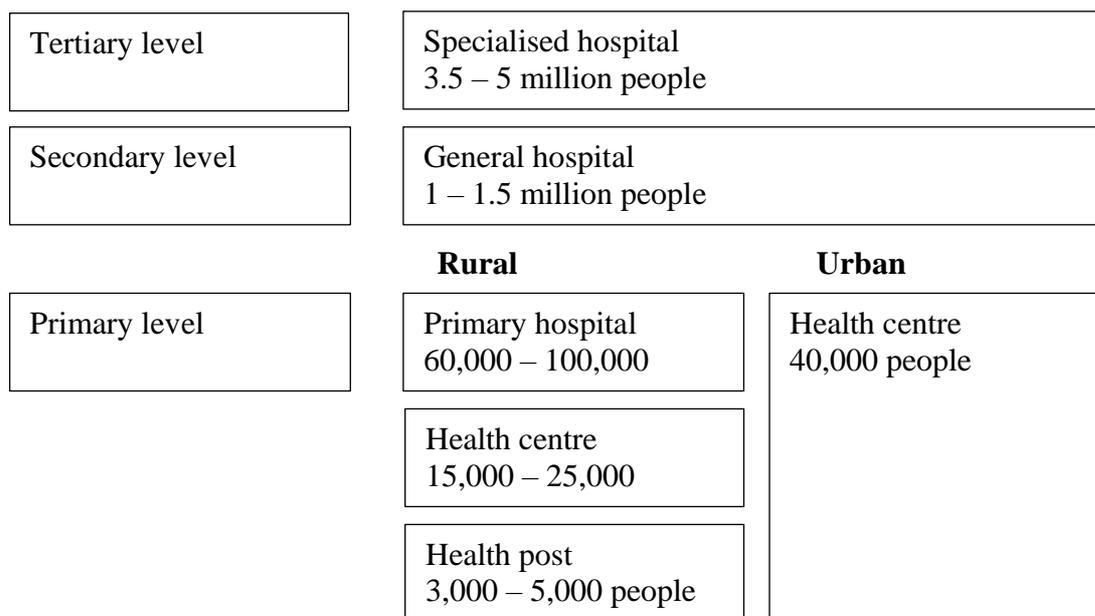
Figure 1: Overview of Ethiopia's health system (Alebachew and Waddington 2015)

There has long been a system of user-fees in the Ethiopian health system. However, some health services are exempt, and some are subsidised by the government. Most of the exempted services belong in the community health programme, the Health Extension Programme (HEP), such as family planning and delivery at primary health care facilities. High maternal mortality rates due to the high number of women who give birth traditionally at home necessitate this service being free. Other exempted services are for example immunisation, treatments for tuberculosis, and newborn and child health care (Ministry of Health 2019a). Poor people also have the right to a fee waiver, which either reduce the price or make the service free. This fee waiver gives the poor access to both subsidised and high-cost services (Habtemariam and Semegn 2018). However, the poverty of the patients often continues to limit their ability to access services as travel and accommodation costs often are prohibitively expensive, and many struggle to pay even low fees.

3.1.1　　The private health sector

The public sector dominates health service delivery in Ethiopia. However, there is also a growing private sector. Both the private for profit and the NGO sectors attract more and more professionals as they are able to provide higher wages and better working conditions, among other things. Especially the private sector has grown considerably in the last few decades (Kitaw, Teka, and Meche 2013; Kitaw 2016), and in the second

Growth and Transformation plan, the government outlines plans to support private investors in establishing specialised hospitals (National Planning Commission 2016). Most of the private hospitals in Ethiopia are located in Addis Ababa, which means that many health professionals seek employment there to bolster their income. The private sector does not have to go through the same complicated procurement system as the public sector. This, combined with private funding and high costs for health services, means that they often have access to more and better resources and infrastructure than public health institutions.

There is also an NGO sector, though it is smaller than the private sector and it remains limited compared to in other African countries. The NGO (and missionary) sector has historically been restricted in Ethiopia. The sector has been viewed with suspicion and consequently been subject to keen monitoring. This has historically largely restricted their activities to humanitarian and relief work. The government distrust of NGOs stems from suspicion that they engage not only in humanitarian activities, but also in human rights and governance activities. In 2009, after a period of liberalisation, the government adopted a law that restricted especially foreign-funded NGO activities so that they could not engage in the latter. Because of a government propaganda campaign against NGOs after the 2005 election, raising domestic funding was extremely difficult (Kitaw 2016; Broeckhoven et al. 2021). A 2019 law has removed many of the restrictions on foreign and foreign-funded charity work.

In Ethiopia, many health NGOs provide material support and training, although there are also some clinics. In Jimma, there were no NGO clinics. Instead, both NGOs and foreign governmental organisations provide help in material means and through training. In the ophthalmology department of JUSH, NGOs provide equipment, consumables, and training, which means that the resource scarcity was not felt as acutely here. When I was shown around in the hospital's laboratory, I was shown the many machines that had been provided by NGOs and foreign government organisations, and when I visited health centres outside of Jimma I was shown buildings and equipment donated by foreign organisations. Likewise, an organisation had donated cars, including an ambulance, to the hospital.

3.1.2 Health professionals

There are three levels of health professionals in Ethiopia. At the community health level are the health extension workers (HEWs) who are rooted in the HEP. This group of health workers are the reason for the major increase in access to primary health care in rural communities in Ethiopia. To be selected, they have to have a 10th grade education and speak the local language. They are in most cases female, which is because the HEP largely deals with issues that affect mothers and children. After completing one year of training, they are stationed in a health post, which serves a *kebele* (the smallest administrative unit in Ethiopia, usually a ward or a neighbourhood) in a rural area, where they serve as salaried government health workers (Kitaw, Teka, and Meche 2013; Bilal et al. 2011).

At the middle level we find, among others, health officers, nurses, and midwives. Health officers are Ethiopian health workers who were reintroduced by the EPRDF as a part of their strategy to increase mid-level health workers. They are trained for four years and placed in primary hospitals and health centres where there is a shortage of physicians, and they are an important part of the task-shifting policies that shifts some physician tasks onto other health workers. In Ethiopia, there are also anaesthetists, who have a diploma or bachelor's degree. They may replace anaesthetist physicians (Kitaw, Teka, and Meche 2013; Dejene et al. 2019). Both nurses and midwives train at either the diploma or the bachelor level. Midwives may also train three years as a nurse and then do one year of midwifery training (Roberts 2018). There are also options to specialise or do a master's degree.

To become a physician, the undergraduate medical degree is 6 years. This includes one year of pre-med, two years of pre-clinical education, two years of clinical training, and one year of internship where the students practice medicine under supervision. Then follows a period of compulsory service. During this time, the physicians work as general practitioners, which is not a specialisation in Ethiopia. After this, physicians may join a residency programme, which are three to four years depending on the programme; for example, surgery, gynaecology and obstetrics, and ophthalmology are four years, whereas internal medicine, paediatrics, psychiatrics, and anaesthesia are three years. Following this, one can choose to do a sub-speciality, which is two years, or a PhD. It is more common to sub-specialise than doing a PhD, although

many have to go abroad to do so. In Ethiopia, there is currently a lack of specialists and sub-specialists, although this is in the process of improving.

3.2   Ethiopia's political history and health governance

In order to understand the current form of the health system and health governance, we must understand how the country has been structured. Only 20 years ago, the health system in Ethiopia was severely underdeveloped. In the 2000 *World Health Report*, the performance of Ethiopia's health system was ranked 180 out of 191 member states (WHO 2000, 202-203). In the same year, the life expectancy at birth was 50.58. While there has been no updated health systems ranking since the 2000 *World Health Report,* the life expectancy at birth in Ethiopia has risen, and was in 2019 estimated to be 68.7 (WHO n.d.-b). This indicates a substantial improvement in population health, which is a result of the increased focus on the development of health service provision in the country, especially on primary health.

In the rest of this chapter, I will first discuss the events that have led to the current political context, and I show how these developments are relevant for the development of (health) service provision in Ethiopia. Lastly, I outline how some international development trends have impacted on national development.

3.2.1   Political developments in the EPRDF period

Since 1991 and until December 2019, Ethiopia was ruled by the EPRDF. The EPRDF was a coalition of ethnic parties from Tigray, Amhara, Oromia, and the Southern Nations, Nationalities and Peoples Region. The Tigrayan People's Liberation Front (TPLF) dominated the coalition until April 2018, when Abiy Ahmed, from the Oromo Democratic Party, became the new prime minister following the resignation of Hailemariam Desalegn after a period of unrest. In December 2019, the EPRDF was disbanded and replaced by the Prosperity Party, with Prime Minister Abiy Ahmed at the helm. The TPLF did not join the new party. However, these more recent developments and their impacts on health in Ethiopia are outside the scope of this thesis.

Prior to 1991, Ethiopia was ruled by the Derg,[2] a military junta whose reign was violent and repressive. Throughout this period, the EPRDF, led by the TPLF, battled against the government, and in 1991 ousted it. When the EPRDF came to power, the Derg's plans for health care had been undermined by their repressive tactics and high military spending (Kloos 1998). While health was not the immediate priority of the TPLF and the EPRDF, the first National Health Policy of 1993 and the first Health Sector Strategic Plan of 1997 set the foundation for the later development of the health service (Croke 2020). The 1995 National Health Strategy identified an inadequate skill mix, a shortage of front-line and mid-level health workers, and the urban bias as the most central HRH-related challenges (Kitaw et al. 2012). However, few improvements were seen in the first decade under the EPRDF. The number of health workers remained low, even compared to neighbouring countries, and especially rural areas continued to experience high attrition as health workers' incentives to remain in their jobs remained limited (Kitaw et al. 2012).

On June 1, 1991, Meles Zenawi, the then-leader of the TPLF, was installed as the president of the Transitional Government, and after the election in 1995 he became the prime minister of the Federal Democratic Republic of Ethiopia. The current political context in Ethiopia must be viewed in light of Meles' rule and the previous TPLF domination. In 2001, a split within the TPLF and the resulting purge of dissidents and a shift away from a consensus-based leadership led to the consolidation of power in the hands of Meles Zenawi (Tadesse and Young 2003). Consequently, previous ideological disagreements were resolved, and the EPRDF came to embrace Meles' ideas about the developmental state (de Waal 2012). This power shift was coupled with a closing of the political space through undermining and restricting the opposition following the 2005 election, in which the considerable support for the opposition had surprised the EPRDF. Party and state structures were at this time greatly expanded at lower administrative levels to ensure greater control. Thus, from 2001 until Meles' death in 2012 a stronger political vision was allowed to emerge (Lavers 2019; de Waal 2018; Croke 2020). The importance of rapid socioeconomic progress was highlighted; while social policies should protect the poor, they should also ensure that the poor could productively participate in society (Lavers 2019; de Waal 2018). A welfare component, which is

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[2] As the Co-ordinating Committee of the Armed Forces, Police and Territorial Army generally is known as. Before they were overthrown, they disbanded, but the surviving members of the Derg dominated the new civilian government.

found in institutions such as those for food security, public service provision (including health care), and national planning has been a crucial part of the developmental state model in Ethiopia; the view was that the state's legitimacy should come from developmental progress, not from winning elections (Bardhan and Mookherjee 2018; Croke 2020). This includes health service provision.

With the TPLF and Meles Zenawi at the lead, Ethiopia entered a period with large reorganisations, modernisation, and economic growth. Alongside this, however, the suppression of civil and political rights, like in the previous periods, continued; Meles justified the low priority given to civil and political rights by asking what good such rights would do in a context of extreme poverty or political chaos. He thought that people had to internalise the values of the TPLF's/EPRDF's developmental project before democratisation could happen. He feared that unless Ethiopia followed his vision towards development and economic growth, it would cease to exist as a nation (de Waal 2018, 2012). On the other hand, the period under EPRDF rule also saw relative stability[3] until the demonstrations against the regime begin in 2014 and 2015. While there has been internal conflicts within the EPRDF, such as the 2001 split in the TPLF, the coalition was able to present as a united party externally until after Abiy was appointed the new leader in 2018 (Aalen 2011, 2018).

3.2.1.1   *The development of service provision*

Much of the state building that was undertaken in Ethiopia in the post-Derg era can be traced back to the TPLF's fight against the Derg. During the insurgency period, the TPLF gained experience in state building, governance, and service provision. As the TPLF liberated areas from the Derg, they faced the responsibility of delivering services to their inhabitants (Croke 2020; Berhe 2020). They recognised that retaining peasant support necessitated tangible incentives, delivered in the form of health, education, and agricultural services, among other things (Vaughan 2011). At the time, most disease mortality was a result of preventable diseases; as such, the TPLF developed health services that prioritised better sanitation, health education, and environmental planning. Rather than developing a complex treatment capacity, priority was given to developing

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[3] Ethnic conflicts has been rising for at least the last two decades, and a number of ethnic groups have been demanding their own separate administrations. However, until recently, the EPRDF managed to keep the conflicts under control (Aalen 2011, 2018).

elementary-level health workers as there was a scarcity of trained personnel and a shortage of medical supplies. Consequently, people were less likely to die from water-borne diseases in the TPLF-controlled areas than in the government-controlled parts of Ethiopia (Berhe 2020).

The TPLF used their experiences with state building and service delivery from this period in developing a health policy for Ethiopia when they were in government (Croke 2020; Berhe 2020). Lavers (2019) argues that their early use of health care to secure support from those they liberated and to ensure self-reliance continued to be important features of the party ideology during their time in government. Accordingly, the government's health policy has been much more people-centred and prevention-focused than that of previous governments. The TPLF's health care provision during the insurgency period allowed them to experiment with governance and service delivery and gain invaluable experience in how to deliver primary health services in the Ethiopian context (Croke 2020). Furthermore, their reliance on the rural (and generally poor) population as a strategy for support was continued into their time in government. As Ghobarah, Huth, and Russett (2004) point out: poor health conditions may lead to economic stagnation and civil unrest, which did not fit into the TPLF's and EPRDF's vision of Ethiopia.

Around 2003, the EPRDF began to give priority to health service development. At this point, the war with Eritrea was over, which allowed this budget to be spent elsewhere, and Meles Zenawi had consolidated power after the internal conflict and purge of dissidents from the TPLF (Croke 2020; Berhe 2020). Multiple health sector plans, such as the HSDPs II-IV and the HSTP has shown a prioritisation of health, and especially primary health care. Where primary health care reforms have been unsuccessful in many LICs, in Ethiopia, primary health care service delivery has been scaled up by building and equipping health centres and health posts, and through the implementation of the HEP, which is a community-based programme built on their experiences with service delivery during the insurgency period. The HEP involves the use of a large number of community health workers (Fieno et al. 2016; Croke 2020). Consequently, health indicators such as child mortality and to an extent maternal mortality, as well as life expectancy at birth, have improved.

In the literature, the improvements in health from this time has generally been attributed to a strong political will and the important role of key political figures (see for

example Admasu 2016; Balbanova et al. 2013; Abraham 2013). Some also attribute the successes in the health system development to for example institutions or state structures (see for example Balbanova et al. 2013; Zulu et al. 2014). A former health minister of Ethiopia – a member of the TPLF and the current WHO director-general – Dr. Tedros Adhanom Ghebreyesus, has said that while programmes to implement primary health care had been undertaken before, there had then been a lack of political commitment and will, whereas the EPRDF "government truly believed that primary health care […] should be the centrepiece of the health system. That is why it succeeded" (from an interview with Dr. Ghebreyesus, BCG 2013). While the official policy formulations of the Derg regime had been focused on community health and prevention and control, urban curative services remained dominant and the community health programmes were never entrenched within the rural communities. The EPRDF regime, on the other hand, has improved access to primary health services dramatically. Of course, it helped that Meles Zenawi himself took a personal interest in the implementation of the HEP, as his consolidation of power meant that his priorities became the government's priorities among other things.

However, those who argue that the successes can be attributed to political will, the role of political figures, or boil it down to effective state structures do not discuss them within the overall political framework or the authoritarian nature of the regime, which are "key features of the Ethiopian political context that have an impact on the health system" (Østebø, Cogburn, and Mandani 2018, 263). As for example Croke (2020, 2) points out, the ever-ambiguous "political will" does not explain how Ethiopia was able to "overcome the barriers to implementation of primary health care programmes at scale that have hindered progress in other countries." Political will is undoubtedly important in ensuring success, but it is not the only factor present. Croke (2020, 8) further writes that "'political will' is powerless without functioning state institutions," although it is not an insignificant factor in service development and delivery. Moreover, political will does not explain the current form or the problems of the Ethiopian health system, such as the high levels of turnover and attrition from the health service.

3.2.1.2   Country organisation

The capacity of the state apparatus is crucial to the development of health services and is an important factor in Ethiopia's relative success in building a health system, given the country's limited resources and its low starting point. The form of state building that took place under the EPRDF more or less conflated the party structure with the state (Tadesse and Young 2003), which helped build this strong state capacity. As Khan, Faguet, and Ambel (2017, 329) states, "the main channel for control is not constitutional or legal, but rather the political party structure," and, as Vaughan (2011, 630) notes, "the capacity of state structures was a strongly political enterprise and accorded the highest priority." Croke (2020) argues that this strong capacity of the state apparatus is one important factor as to why Ethiopia has been successful in developing a community health programme where many other LICs have failed. This strong state capacity was achieved by pursuing a strategy of decentralisation through hybrid federalism, wherein a centralised decision-making structure was instituted and local partners loyal to the central party were employed. The decentralisation policy seemingly gives greater responsibilities to the regional and local governments and the local communities, such as in the delivery of social services (Garcia and Rajkumar 2008). However, by ensuring the coalition parties or their supporters were in control in the legally quite autonomous regions, creating strong state structures to which effective power was shifted, and strengthening local administrations, the TPLF and the EPRDF secured control over every level of governance (Croke 2020; Garcia and Rajkumar 2008). Thousands of new local government positions were created – replacing elected representatives with civil servants with natural upward accountability – in health, education, and agriculture, which served both to co-opt the opposition and to deliver services in health, agriculture, and elsewhere (Croke 2020; Vaughan 2011).

In the health sector, decentralisation happened first to the regional levels, with Regional Health Bureaus (RHB) and Zonal Health Departments. After this followed a second decentralisation process to the *woreda* level, with Woreda Health Offices. The Federal Ministry of Health, the RHBs, and the Woreda Health Offices all take part in the decision-making processes pertaining to the development of the health system and the implementation of the policies (Ministry of Health 2019c). The overarching health policies that emphasise decentralisation and prioritisation of health promotion, disease prevention, and basic curative services are formulated at the federal level in the

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Ministry of Health. The Ministry of Health comes together with the RHBs in a joint steering committee whose objective is to ensure the implementation of policy. Basic strategic documents such as the HSTP are formulated at the meso level to guide priorities within the local level of the health sector. The local level is responsible for providing the health services (Habtemariam and Semegn 2018; Teshome et al. 2020). To facilitate effective local governance, the Ministry of Health and the RHBs have imbued the local level with responsibilities, authority, power, and resources – yet the local levels are policy implementers, not policy makers, and consequently have limited power to enact change.

Khan, Faguet, and Ambel (2017) argue that these decentralisation policies are designed to consolidate the central government's control over the finances and administrations of local government, as well as controlling political competition. In theory, federal governments are effective when they are downward accountable to voters and public officials, so that resources are distributed equally to regions and districts (Khan, Faguet, and Ambel 2017). Emmenegger (2016) writes that authoritarian regimes, such as Ethiopia, may decentralise to a greater extent than democratic regimes; decentralisation becomes an instrument for retaining central control over the peripheral people and resources. In the Ethiopian federal system, local governments have a high degree of upward accountability, but this is not accompanied by downward accountability (Yilmaz and Venugopal 2008). As Fieno et al. (2016) write: "there might be a temptation to argue that authoritarianism might be good for development." Without downward accountability and pressure from civil society, or the existence of the electorate of a democratic country, bureaucrats can implement unpopular policies without notable repercussions. However, as Fieno et al. continue to argue: there are many cases in which authoritarian regimes are not more efficient in developing health services, including HRH.

3.2.1.3   *State apparatus capacity*

The capacity of the state apparatus also extends to its ability to mobilise and utilise financial resources efficiently. Without financial aid and the ability to control its use, it is unlikely that Ethiopia would have been able to afford the development of the health system, especially the HEP. To this end, the Ethiopian government has been highly successful in mobilising aid funds through aid management processes and institutions,

and as Croke (2020, 8) argues, the efficient way in which Ethiopia has employed aid funds "can reflect not just aid dependence but can also reflect state capacity, as Ethiopian leadership's investment in a more capable state attracted large aid inflows." Despite massive human rights violations, Ethiopia has become a "donor darling" and continues to receive rising amounts of aid due to its important geopolitical position in the Horn of Africa (Lie and Mesfin 2018). Although the annual aid flow has been inconsistent and much of it has been channelled into vertical programmes, Ethiopia has been able to direct much of the assistance into HRH development through the Aid Management Platform, which was created by the Ministry of Finance and Economic Development to harmonise the various aid flows (Fieno et al. 2016; Teshome and Hoebink 2018).

However, while health aid is employed efficiently, it does not hide the fact that the Ethiopian health sector is highly dependent on external financing. The HEP, for instance, remains largely donor funded, with approximately 73% of its funding coming from donors (MERQ Consultancy PLC 2019). Furthermore, the capacity of the government to raise funding for social-sector development has never been enough to match the cost of expanding the health system (Kitaw et al. 2012). The low overall financial funding for the health sector means that it is difficult to combat the many issues that arise which require financial solutions, such as that of brain drain and rural retention – whether these solutions would be increasing wages or providing non-monetary forms of compensation, or improving the working conditions for health workers.

3.2.2   Impacts of international development trends on health policies in Ethiopia

The development of the health system in Ethiopia – and in other countries – does not exist in a vacuum. Rather, it is influenced both by internal as well as external forces. In this section, I discuss some of the international development trends that have had an impact on health system development in Ethiopia. In the period after the 1980s, fiscal pressures led to cuts in national health budgets, which caused many primary health care programmes to fail. However, around the time of the millennium – which was about when the development of the Ethiopian health system began earnestly – international development thinking shifted away from its ideas of the "rolling back" of the state as

the intricacies of development had become more recognised. Recognition of the state as an important development actor and service provider was re-emerging (de Waal 2012). This was largely due to the MDGs' focus on poverty and hunger, primary education, gender equality, maternal and child health, diseases such as HIV/AIDS and malaria, environmental sustainability, and global partnerships to ensure development. Consequently, there was a growing recognition of the macroeconomic significance of health and of the global interrelatedness when it comes to health problems such as epidemics (Kitaw et al. 2012). Yet, in many ways, the Ethiopian state-building project differed greatly from international ideas about "best practice" at the time, and the HEP and other local governance institutions contradicted mainstream donor thinking at the beginning of the decade (Croke 2020). The developmentalist ideology that underpinned Ethiopian policies contradicted the neoliberal economic model pushed by the World Bank and the IMF – institutions that were adamant that economic growth should be market based and not government controlled. Yet, Ethiopia was able to attract significant donor funding on its own terms.

International development trends such as the structural adjustment programmes (SAP) and disease-specific interventions have also affected the Ethiopian health system more negatively. One concern has been the downsizing of the Ministry of Health as a consequence of structural adjustment requirements. Kitaw et al. (2012) and Kitaw (2016) argue that the result of this has been a Ministry of Health which capacity to aid in developing, dissemination, and giving technical support has been constrained at the policy and strategic leadership level. Moreover, their ability to monitor and evaluate health development at regional levels, as well as to regulate the private sector, were also constricted. The technical and professional structure of the central ministry was dismantled in favour of staffing the RHBs. Many departments in the ministry instead came to rely on human resources provided by UN agencies.

Another development trend has been the increase in disease-specific interventions, spearheaded by global initiatives such as the Global Fund, PEPFAR, GAVI, and many more. At the same time, from the late 1990s, the defining international strategy or instrument in health was the Sector Wide Approaches (SWAp), which was a result of following discontentment with the SAPs and project-based development assistance (WHO 2006a). SWAps were developed to overcome problems of aid fragmentation, and they encouraged the practices of country ownership in partnership

with development partners. The first HSDP was developed based on this principle (Teshome and Hoebink 2018; Peters, Paina, and Schleimann 2012). However, when faced with urgent international priorities or global health initiatives, SWAps have often been sidestepped (Peters, Paina, and Schleimann 2012). Kitaw et al. (2012) argue that the verticality of the disease-specific interventions directly conflicts with SWAps. They contend that these international paradigm changes in health development, with their associated macro-economic reforms, have meant a decrease in government health expenditures. At the same time, the SWAp strategy of "One Plan, One Budget, and One report," which aims for the harmonisation and alignment within the health sector, has further allowed the Ministry of Health to reinforce a strong country ownership over the development of Ethiopia's health policies. The strategy extends from the federal level to the local and community levels (through the HEP). While the coordination declines the further down in the chain it goes, it ensures that aid is coordinated in a joint financing arrangement (Teshome and Hoebink 2018).

3.3   Conclusion

In sum, it is clear that historical and political developments in Ethiopia and internationally in the last few decades have shaped the contemporary form of the Ethiopian health system. Beginning as a form of resistance, the relative success of the community-based health system and consequent improvement in population health is tightly wound up in the political control of the population. Yet, despite a strong state capacity which is able to shoehorn foreign funding into health system development on their own terms, the financial capacity of Ethiopia remains limited and aid dependent. In the next chapter, I discuss how this gives rise to problems of low motivation among health workers and the resulting problems of retention.

Chapter 4: The scope of and policy solutions to HRH challenges and health worker migration in Ethiopia

The permanent emigration of Ethiopians is a relatively recent phenomenon. Before the 1974 revolution, the vast majority of all who left the country did so for education and then returned. This was a result of Haile Selassie's modernisation,[4] in which there was a massive increase in the number of people who left Ethiopia to study abroad; from almost none to around 20,000 in the period between 1941 and 1974. Most of these returned to work in the government apparatus (Keller 1981; Adugna 2019). An Ethiopian diaspora did not come into existence until after the 1974 revolution; as a result of the violent military regime that came to power, Ethiopians began fleeing the country and did not return. After the EPRDF overthrew the military regime in 1991, people continued to flee political persecution, although not to the same degree. However, while Ethiopian migration rose out of conflict, and while political persecution has persisted, current migration is mostly driven by other factors and is largely labour-driven (Schewel and Fransen 2018). Factors that lead to skilled migration will be discussed in more detail in the next chapter.

In this chapter, I will first discuss the extent of health worker migration in Ethiopia. I will begin by briefly outlining the scope of emigration from Ethiopia, although the exact numbers are uncertain. Next, I review studies on the future plans of Ethiopian medical students, which show that a large proportion hope to leave the country, and that within Ethiopia, many would prefer to work in urban areas. After this, I discuss studies among health workers in Ethiopia on migration and plans to leave. Although there are no studies done specifically on brain drain, this section serves to illustrate the difficulty of retaining health workers in Ethiopian public health institutions. Then, I look at studies on the demographics of those who leave or want to leave, which indicate that Jimma may struggle more with health worker turnover than other places in Ethiopia. Issues of brain drain and retention are directly related to HRH policies and the other factors that contribute to the HRH challenges. I therefore next

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[4] Haile Selassie spoke about introducing a "foreign-inspired civilization" into Ethiopia (Selassie 1976, 6) which has led many to call the modernisation process a "westernisation." However, this modernisation was largely centred on Addis Ababa, Asmara, Harar, and a few other urban centres; a sharp contrast to the rest of Ethiopia (Marcus 1994). Weis (2015, 12) argues that Haile Selassie's "reforms were mere performances of a Western-style modernity, and in reality they served to cement his position as an absolute monarch.

examine the Ethiopian HRH policy responses to the issue, including policies more specifically on retention. Lastly, I summarise the local retention strategies at JUSH. This I do with reference to the interviews, as this is not documented anywhere I can access.

4.1 The scope of emigration

Adugna (2018) argues that emigration from Ethiopia currently is occurring at a large rate and points to a Gallup World Poll survey which shows that 46% of the Ethiopian adult population would leave if they were able to. However, the UN 2015 *International Migration Report* shows that emigration has been stable at around 1% of the population in 2000 and 2015 (United Nations 2016), although this number is higher among the tertiary educated population (Schewel and Fransen 2018). This discrepancy between the high number of people who want to leave and the much lower number who are able to leave reveals how using intentions for a measurement of emigration does not lead to reliable results. In this case, is likely partly explained by the high costs of migration and the largely poor population. The Ethiopian currency cannot be exchanged outside of Ethiopia, and the Ethiopian foreign exchange reserves are unstable due to a low supply of foreign currencies. Remittances account for 35% of the import of foreign exchange currency, yet the poor are generally not the primary recipients (Beyene and Gebrewolde 2020). Furthermore, it is generally much easier for skilled workers to gain resident permits than for unskilled workers, which explains the higher emigration rates among this part of the population (Abramitzky, Boustan, and Eriksson 2013).

Three main migration corridors for unskilled workers have emerged. The first is eastward, to the Gulf States and the Middle East, the second is southward to South Africa, and the third is northward through the Sahara to Libya and beyond. Ethiopian villages have emerged as a source for low-skilled labour for the international labour market, with women travelling to Arab countries to find domestic work and young men travelling to South Africa to find work (Adugna 2018).

Simultaneously, there has been an intensification of the emigration of skilled people, or brain drain (Adugna 2019). Brain drain rates from the education and medical sectors, especially, has been high (Adugna 2018). Ghosh (2005) has noted that more Ethiopian doctors work in Chicago than in Ethiopia, which I was also told by several

respondents. These numbers are old, however, and this has likely changed with the recent scaling up of medical education, but it helps illustrate the extent of the problem. Furthermore, there are uncertainties in estimating the extent of skilled migration at both global and national levels, and I have consequently been unable to find updated information on this. There are no exact numbers for the size of the Ethiopian diaspora, but recent government data puts the estimate at over three million, residing mostly in North America, Europe, and the Middle East (Adugna 2019), although this number may by now already have increased. Physician brain drain from Ethiopia is estimated to be between 15% and 30%, whereas nurse brain drain is estimated at around 20% (Cabri 2016). Moreover, Ethiopia counts among five African countries (Egypt, Nigeria, South Africa, Ghana, and Ethiopia) who in 2015 accounted for 76% of all African-educated physicians in the US, which indicates that the number of Ethiopian physicians who leave continues to be significant (Duvivier, Burch, and Boulet 2017). Ethiopia is also among the top-20 countries with the highest emigration rates, although not in absolute numbers (Adovor et al. 2021). This is consistent with earlier findings (WHO 2006b).

4.2 Plans for practice and migration intentions among students

While it is difficult to know the exact number of Ethiopian physicians abroad, some studies have been conducted on Ethiopian medical students' plans after graduating and these give an indication of the scope of the problem. The discrepancy between those wanting to leave and those actually leaving is not as great among health workers and others with higher education as it is among the general population. Furthermore, the numbers of students who want to leave is telling of how many are dissatisfied with their jobs, which has implications for their motivation. In a study among medical students at Addis Ababa University, Kelly et al. (2019) found that only 49.5% of the surveyed students were planning to practice medicine in Ethiopia post graduation, whereas 25% were planning to leave the country and 25.5% were undecided and considered practicing elsewhere. They also found that students whose primary reason for going to medical school was that they wanted to become a doctor were more likely to want to stay. Students whose principal reason for studying medicine was not to become a doctor were more likely to leave.

In an earlier study conducted in 2009, Deressa and Azazh (2012) found that 53% of the medical students at Addis Ababa University wanted to leave Ethiopia after finishing their education. The most common intended destinations were the US (42%) or a European country (15%). They found that students in their last years of their undergraduate training (including the internship) were more likely to want to leave than students in their first years. Men were more likely to want to leave than women. In a study among medical students at Jimma University and St. Paul's Millennium College in Addis Ababa, 59.4% of the surveyed students said that they were likely or very likely that they leave within five years. Within ten years, as many as 73.4% said that they intended to go abroad (Johansson 2014). This latter study indicates the importance of including longitudinal data when studying turnover and brain drain in order to identify who retention policies should target. Due to the compulsory service period after medical school, more students may have intentions to leave further into the future than immediately after graduating. Interestingly, these studies have only been conducted in well-established medical schools. A study conducted in a newer medical school, located in the periphery, may provide other insight.

The high number of students who intend to migrate reflects numbers found among medical students in other countries as well. Silvestri et al. (2014) report that 28% of all the surveyed medical and nursing students from 16 countries in sub-Saharan Africa and Asia with critical shortages of health workers aspired to emigrate, with only 15% of students reporting that they were very unlikely to emigrate. In a study on medical students from Pakistan, Sheikh et al. (2012) found that 60.4% wanted to leave for a career abroad. The very high number here can partly be explained by the study only dividing the students into either yes or no. Furthermore, the fear of terrorism and harassment of physicians was reported as a reason for wanting to leave, and this push factor has not been reported as significant in Ethiopia. Similarly to Kelly et al.'s (2019) results in Ethiopia, de Silva et al. (2014) found in a study on medical undergraduates and recent graduates in Sri Lanka that 23.8% intended to migrate, while 32.3% where unsure of whether they should stay or leave. A survey of final-year medical students in Uganda also report a high number of students who intend to leave, with 44.6% aspiring to leave the country and 11.2% wanting to leave the health sector (Kizito et al. 2015).

Not all of those who want to leave manage to do so, however. Investigating the retention of surgeons in East, Central and Southern Africa between 1974 and 2013,

Hutch et al. (2017) found that 85.1% of the surveyed surgical graduates did not leave the country they were trained in, and only 6.6% migrated to countries outside of Africa. These numbers are much lower than the intentions of the students outlined above. In Ethiopia, Derbew, Laytin, and Dicker (2016) found that 75.8% of the surgical graduates between 1985 and 2013 continued to practice in Ethiopia, with 80.9% working in the public sector. Considering the low number of surgeons and other who reside in Ethiopia, however, this proportion is still alarming.

Moreover, the many who do leave likely aggravate the urban bias in medical practice, as there are fewer physicians left to practice in rural areas. Like in other countries, both LMICs and HICs, the unequal distribution of HRH between rural and urban areas is widespread in Ethiopia. Many of the surveyed students in Deressa and Azazh's (2012) study indicated that they did not want to practice medicine in a rural area, with only 30% saying they initially wanted to practice in a rural setting, with students from rural areas or older students more likely to plan to do so. Assefa et al. (2017a) also found that students from rural areas were more likely to work outside of urban centres. Deressa and Azazh's (2012) study only dealt with initial plans, however, and because the compulsory service period after finishing medical school is significantly shorter for those who practice in rural areas, the number of students who ultimately will choose to practice rurally after this is likely much lower.

Assefa et al.'s (2017a) study may tell us more about what the physician labour force will look like further into the future. They found that most of the medical students intended to practice in a clinical or patient care setting in referral/teaching hospitals, rather than in primary or general hospitals. Furthermore, the surveyed medical students were more likely to want to work in large urban areas. This is concerning considering Ethiopia is a largely rural country, but makes it evident why policymakers have prioritised low- and mid-level health professionals and task-shifting in the HRH policies. Most of the study participants would also like to work in the private sector. Opportunities for private practice, either full time or part time, are greater in large urban centres, which partly explains the preference for working in urban areas. Assefa et al. (2017a) suggest that another reason may be that the medical education curriculum further contributes to the urban bias by not preparing students for rural practice. Other studies also suggest the importance of preparing students for working in rural areas (Frambach et al. 2015; Chuenkongkaew et al. 2016; Silvestri et al. 2014). In general,

Schewel and Fransen (2018) found that most young people in Ethiopia want to live in an urban area, and that this desire is linked to those who have education as low as the primary and secondary level. Ethiopia may consequently in the near-future begin to experience urbanisation at the same level as elsewhere in Africa.

4.3 Migration demographics

It is difficult to say something about the demographics of those who go abroad, although the trend that emerged from the interviews was that among physicians, it is generally those who have not yet specialised. However, there has not been conducted a study on the Ethiopian medical professionals who have left the country. Studies on Ethiopia that deal with brain drain often deal more generally with the problem of retention, which deals both with emigration and with attrition or internal migration, and with the imbalances in the rural-urban distribution. Research generally does not distinguish between the destinations of those who leave; instead, researchers study who and how many have left or plan to leave. Moreover, most of the research is concerned with intentions to leave, rather than the actual numbers who have left. Additionally, some studies on health worker satisfaction may also tell us something about who are more likely to leave.

4.3.1 Turnover rates and intentions

Several studies have been conducted on the intention to leave among health professionals in specific locations across Ethiopia. They all paint a bleak picture, with a large number of professionals intending to leave their place of employment, although not necessarily the country. In the University of Gondar, a survey across all levels of health professionals found that 52.5% reported intentions to leave (Abera, Yitayal, and Gebreslassie 2014). These findings are similar to those of Ferede et al. (2018), although they reported a higher intention to leave among health professionals working in public health institutions in North Shoa Zone in the Amhara Region, at 61.3%. Other studies in Ethiopia have reported similar findings. Getie, Betre, and Hareri (2015) reported that 59.4% of the surveyed nurses working in public health institutions in East Gojjam in the Amhara Region were planning to leave. Similar results have been found among nurses

working in public health facilities in Sidama Zone (now Sidama Region), where 50% planned to leave (Asegid, Belachew, and Yimam 2014).

In Jimma Zone, two studies have been conducted with similar results. Among health professionals who work in public health centres, Kalifa, Ololo, and Tafese (2016) reported that 63.7% of the participants were intending to leave their job. Among the health professionals employed at JUSH, Yami et al. (2011) found that 54.4% had intentions to leave the hospital within five years. Unlike Kalifa, Ololo, and Tafese's study, Yami et al. also asked for future plans, and found that only 15.9% intended to stay after five or more years. Interestingly, of the surveyed physicians, none planned to stay for longer than five years, which impede skill and knowledge creation and creates a knowledge gap. This has serious implications for the available health services in the area, as JUSH serves a large population. At the time of Yami et al.'s study, the catchment population was around 12 million, and today it is likely between 20 and 22. Their study was conducted before the new hospital was built, however, which may have had an impact on job satisfaction – and consequently the turnover intentions – of those who currently work there. A new study should therefore be conducted.

The reasons given for leaving or wanting to leave are largely similar across the different studies. In East Gojjam, nurses cited, among other things, low salaries, few training opportunities, difficulties with transportation, and low or lack of procedural justice in their places of work as reasons for leaving (Getie, Betre, and Hareri 2015). Among the health workers who worked in health centres in Jimma Zone, low job satisfaction, bad working environments, high work pressure, and discontent with the management system were given as reasons (Kalifa, Ololo, and Tafese 2016). The same motives for leaving or wanting to leave have also been found in other studies (see for example Mengistie 2020; Gebregziabher et al. 2020; Abera, Yitayal, and Gebreslassie 2014; Ferede et al. 2018), and have also been recognised in health policy documents as affecting the motivation and retention of health staff (Ministry of Health 2015, 2016).

All these studies indicate that about 50-60% of health professionals across Ethiopia have or have had plans to leave their place of employment in public health institutions. The variation between these can likely be explained by differences between workplaces and between professions. However, while all the reviewed studies report similar findings on job satisfaction and the reasons given for wanting to leave, there is little room to explore other possible reasons for low job satisfaction or wanting to leave

in a quantitative survey, which shows the necessity for an in-depth qualitative study. It is noteworthy, however, that only a few of the studies on turnover and the intentions of the health professionals have a qualitative component at all. Kalifa, Ololo, and Tafese (2016) use a mixed methods approach, which gives context to and supports the quantitative findings. However, it is unclear what kind of qualitative interviews were conducted and whether the conversations were allowed to stray from the quantitative results. The study conducted by Asegid, Belachew, and Yimam (2014) on job satisfaction and intentions to leave among nurses in Sidama Zone (now Sidama Region) illustrates the need for further and perhaps more large-scale research using both qualitative and quantitative methods. In their study, some of the qualitative and quantitative data did not support each other, which may indicate a distrust of the survey environment by those who participated in the qualitative interviews. The repressive political context in Ethiopia may be one explanation for this difference. Another explanation may be that those selected for the in-depth qualitative interviews had leadership positions, and they may therefore hold different opinions than other employees. Lastly, the length of the in-depth interviews were short, at only 15-20 minutes, which limits how much information the respondents are willing to or able to provide. In Gesesew et al.'s (2016) study, the qualitative component involved interviewing health managers and consulting administrative records to assess the existing staff acquisition and retention activities. Only quantitative methods were used to assess the health care providers' views on these activities, which may mean that important insights may have been overlooked.

4.3.2   Who leaves?

But who leaves? In a study on the distribution and attrition among physicians in the Ethiopian public health sector between 2009 and 2015, Assefa et al. (2016) found that 24% of the physicians in 199 hospitals across five regions and two city administrations left their duty stations. Among these, they found that there is generally a lower chance of wanting to leave among physicians who work in referral hospitals compared to district and general hospitals. Physicians who work in primary hospitals were twice as likely to leave as those who work in referral hospitals. Those who work in general hospitals were 1.38 more likely to leave. This aligns with findings that younger and less experienced physicians are more likely to leave their jobs, which partly can be

explained by the deployment of new graduates to rural areas with poor infrastructure who leave this job after their compulsory service period is over. This finding is also supported by a study on the career intensions of medical students, which found that students would prefer to work in referral hospitals over the two other hospital types (Assefa et al. 2017a). An explanation for this is the relative remoteness of these general and district hospitals. At the same time, from among physicians, these health institutions mainly employ general practitioners, who are more likely to leave their jobs for different reasons; for instance, a not significant number go abroad, and many apply for residency programmes once their compulsory service period is over.

Yet the remoteness of general and primary hospitals is not the only factor in leaving intentions. In eastern Ethiopia, health workers who worked in health centres were found to be more satisfied than those who worked in hospitals (Merga and Fufa 2019). In a study among health workers in health institutions in the south-western part of the country, which included JUSH and another hospital, Gesesew et al. (2016) found that leaving rates were much higher in the hospitals than in health centres, despite JUSH being a referral hospital. Why this is has, however, not been discussed to the best of my knowledge.

Of import to this study, Assefa et al. (2017b) notes that a physician working at Jimma University was 1.66 times more likely to leave than a physician working at Addis Ababa University, and significantly more likely again to leave than those working in Mekelle University or the University of Gondar. Among different professional groups, the literature suggests that there are certain differences between the regions when it comes to those who leave, intentions to leave, and job satisfaction. Abera, Yitayal, and Gebreslassie (2014) and Ferede et al. (2018) have found that physicians are much less likely to have the intention to leave than other professional groups in Gondar referral hospital and in North Shoa Zone, respectively. In south-western Ethiopia, however, Yami et al. (2011) found that physicians have a greater probability of planning to leave their place of employment, and Gesesew et al. (2016) found that specialist physicians were in the top three professional groups who had left in between 2009 and 2014. The two latter studies were either only or partly conducted among health workers at JUSH. Despite JUSH being a referral hospital, the other factors, such as the relative remoteness of Jimma, infrastructural underdevelopment, and a lack of significant private sector opportunities, likely affect the physicians'

likelihood of wanting to leave. On the other hand, generally, physicians are targeted with more retention mechanisms, such as non-monetary forms of compensation in the form of housing and transportation, or monetary forms such as higher payments for being on duty than other health professionals, and this can partly explain why physicians in other places are more likely to stay. However, in Jimma, these mechanisms are also in place, yet it may seem like JUSH has a harder time retaining its physicians than hospitals in other regions. At the same time, the different findings of these studies may also come down to differences in research design.

Among physicians, it is often the general practitioners who leave the country. The US is generally the receiving country of choice, as it accepts the Ethiopian undergraduate medical education as long as physicians pass the United States Medical Licensing Examination. From here, they are able to enter the residency programme in the US. However, the US does not accept the Ethiopian residency programme, and people who have already specialised have to go through a residency programme again in order to practice. As there also is a compulsory service period post residency in Ethiopia, many of the specialist physicians are therefore reluctant to leave Ethiopia at this time.

While it is much more common for younger physicians to leave the country than the more experienced ones, those with more experience will often leave less attractive places, such as Jimma, to go to larger urban centres where there are more opportunities for career development and dual practice. Addis Ababa is by far the most common destination for physicians who move across region borders. The proportion of specialists is thus much higher in urban centres than elsewhere. For example, Assefa et al. (2016) found that the proportion of specialists and sub-specialists were much higher in Addis Ababa and Dire Dawa city administration than in the big regions of Oromia, Amhara, and SNNPR, where the proportion of specialists and sub-specialists was very low. This is concerning considering the shift in the epidemiology of diseases towards non-communicable diseases which require, among other things, specialist treatment and public health expertise, yet the majority of the physician workforce are general practitioners without specialisation. Rural retention is in general a problem, and it also extends to other professional groups, such as nurses. For example in East Gojjam, Getie, Betre, and Hareri (2015) found that nurses who worked in rural health care

institutions were 2.1times more likely to intend to leave than nurses who work in urban areas.

Among physicians, overall, women have been found to be more likely to leave their jobs (Assefa et al. 2016). However, among physicians who work in medical schools, no difference in the rate of turnover between women and men was found (Assefa et al. 2017b). As male medical students have been found to be more likely to want to work in remote or rural areas (Assefa et al. 2017a), this may indicate that overall, female physicians are less likely to want to work in rural areas than men and therefore also to leave these areas, but there are no difference between men and women when it comes to urban areas. Among nurses, some studies have found that men are more likely to leave than women, and that women often are more satisfied with their job than men (Asegid, Belachew, and Yimam 2014; Ayalew et al. 2019). Gesesew et al. (2016) found that overall, among mid-level and high-level health professional groups, men were almost twice as likely to plan to leave compared to women. The difference in findings between the different health worker groups have not been examined, although an in-depth study on this may provide helpful insight for retention policies.

When it comes to age and work experience, physicians who are born before 1975 and between 1975 and 1985 have been found to have a lower leaving rate than those born after 1985 (Assefa et al. 2016; Assefa et al. 2017b). These studies suggest that those who have stayed for long are more likely to continue to stay in their jobs. Similarly, Merga and Fufa (2019) found that in health institutions in eastern Ethiopia, job satisfaction was higher among those who had ten or more years of experience compared to those with five or less years of experience, although they also found that those who were under 25 years old were more satisfied than those who were 25-34 years old. Among health workers at JUSH, Yami et al. (2011) found higher job satisfaction among those with more than ten years of experience. Those who are more satisfied with their jobs are generally less likely to leave than those who are dissatisfied (Kalifa, Ololo, and Tafese 2016). Interestingly, in Gondar University Hospital, Abera, Yitayal, and Gebreslassie (2014) looked at the connection between educational status and intentions to leave, and found that as the respondents achieved higher levels of education, they were more likely to plan to leave.

The link between work experience and age to likelihood of staying in one's job may also be related to professional and academic rank. Among physicians who work in

medical schools, those who have achieved the rank of associate or full professor are significantly less likely to leave than those who are lecturers or assistant professors. However, few have reached this rank. The same study also found that younger and less experienced physicians had low turnover rates, however, the authors suggest that this is because of the scaling-up of medical education, and because the compulsory service period after graduating may delay the eventual resignations of these physicians (Assefa et al. 2017b). What the reason for staying after achieving higher professional rank is, is, however, not studied. But as some respondents suggested, recognition in the form of for example promotions may make them more willing to consider staying. Furthermore, some studies also found that the lower the salaries, the less likely the health workers were to stay (Abera, Yitayal, and Gebreslassie 2014; Yami et al. 2011; Getie, Betre, and Hareri 2015), and the higher the professional or academic rank, the higher the salaries. There is consequently likely a link between years of tenure, salary level, and the likelihood of staying. This shows the importance of including a qualitative component on these studies, as knowing the reasons why someone stays or leaves, not only who does so, may positively influence retention policies.

4.4 Policy solutions and retention strategies

Throughout the EPRDF period, Ethiopian health policy has acknowledged that HRH development is a vital component of strengthening the health system overall. However, until the launch of the HEP and the HSDP II there were no formal policy or strategy for the development and planning for HRH. Now, however, the rapidly increasing health services required many more health workers to meet staffing requirements. A high increase in the health workforce followed from the establishment of new training facilities, although the health worker to population ratio remained low (Kitaw, Teka, and Meche 2013). The factors that contribute to the continued HRH challenges in Ethiopia are many and interrelated. Among these are poor workforce planning; a long-lasting underinvestment in the training, education, and deployment of the health workforce; inadequate compensation and insufficient priority given to the retention and motivation of the health workers; poor financing of the health sector and a lack of opportunities for professional development; poor collaboration among stakeholders, including the different ministries; and inadequate human resource management systems and practices at the national, regional, and local levels of the system (Jhpiego 2019).

4.4.1   HRH policies

The Ministry of Health has developed strategic plans for HRH. The 2016-2025 National Human Resource for Health Strategic Plan aims to increase the utilisation, retention, and performance of health professionals. This includes, among other things, improving the motivation of health workers, and improving the distribution and skill mix of health professionals across the country (Ministry of Health 2016). However, critics of this plan argue that while the strategy seemingly is all-inclusive, it suffers from a number of limitations. Haileamlak (2018) argues that its goals are insufficient to achieve UHC. He argues that strategic planning when it comes to HRH is often only addressed by focusing on the number of health workers in the form of the scaling-up of education, accelerated training, and changes to the curriculum. This, he argues, has happened at the expense of other human resource policies and improvements in management systems. At the same time, he also concurs with the government's analysis that one of the major challenges for HRH, both in the current and in the future health systems, relate to the number of health workers. He contends that "the facility scale-up, the projection of health workforce and the costing set for the upcoming years are far below what [Ethiopia] will require to achieve UHC as per the World Health Organization's guidelines" (Haileamlak 2018, 250). There is a shortfall of almost 100,000 health workers between the strategy projections and what is necessary to reach the WHO goal, and there are also shortfalls in the number of health facilities and cost projections. To achieve HRH goals, challenges of quality, skill-mix, distribution, attrition, and career paths also need to be included in the policies.

Some steps have been taken, however. During their time in office, the EPRDF government instituted major human resource reforms, which first gave special focus to the development of the HEWs in order to staff community-level services, then focused on expanding the mid-level health professionals, before increasing Ethiopia's capacity to produce medical doctors. One of the reasons for the growth of the health worker density has been the increase in number of training institutions, as well as a "flooding" policy, which involves a massive expansion of the existing schools' intakes of students. As a result of these HRH developments, a 2015 report states that 90% of the rural population (estimated at the time of the report to be about 80% of the population) have gained access to a health care facility within a two-hour walk (Alebachew and

Waddington 2015). The then-minister of health in Ethiopia reported in 2016 that 99% of Ethiopians by then had access to primary health care (Admasu 2016). However, while health posts are nearly universally available at the *kebele* level, this has not necessarily meant a universal access to health services. The HEP has been implemented to a lower degree in pastoral communities than in agrarian communities, and the skill mix and professional level of the health workers are in many places not adequate. Nor do all health posts meet infrastructural and construction standards (MERQ Consultancy PLC 2019). Ethiopia has also reached MDG 4: reduce child mortality through the attention given to primary health, and there has been a major increase in the number of health facilities across the country (Kitaw, Teka, and Meche 2013). Since 2004, Ethiopia has hired and deployed more than 40,000 HEWs and constructed more than 2,800 health centres and 15,000 village-level health posts (Alebachew and Waddington 2015; Croke 2020; USAID 2019).

Task-shifting policies from physicians to mid-level health professionals – such as health officers – and the increased education of this level of health workers have also reportedly helped improve the distribution of HRH across Ethiopia. Alebachew and Waddington (2015) write that the retention in rural health posts of these health workers appear to be better than for medical doctors, which likely partly results from the limited international marketability of their skills. When more mid-level health workers are trained to take the place of physicians in primary and district hospitals, not only does the government save money on education and salary costs, but they help address the deficiencies that arise due to the emigration of physicians.

Both the number of medical graduates and the number of training institutions have also increased. Nevertheless, the Ministry of Health has expressed concern that the "capacity and readiness of higher educational institutions to assure quality of education has not developed proportionally" to the scaling up of the training of health workers (Ministry of Health 2015, 46). One issue that relates to the varying quality of medical education was recognised in the HSTP as relating to irregularities in standards of accreditation requirements between institutions, which requires the Ministry of Health and other relevant entities to be capacitated to be involved in the accreditation of medical training institutions (Ministry of Health 2015). In an evaluation of the HSTP, it was recognised that it was an ambitious plan, and that while the access of the population to health professionals improved, the low quality of the pre-service (medical school)

education persisted and the number of health workers remained inadequate despite the massive expansion of medical training institutions (Ministry of Health 2019b).

Two of the goals of the HSTP period, from 2015 to 2020, were to continue to increase the ratio of health workers to population, from 0.8/1,000 to 1.6/1,000, and to improve retention (Ministry of Health 2015). However, the number of health workers was still inadequate towards the end of the period (Ministry of Health 2019b; Haileamlak 2018), and a significant number of health workers have continued to leave – either their positions or the country. This continued shortage of health workers is further aggravated by inequitable geographic distribution. The ratio of physicians to population has varied greatly, from 0.33 physician per 1,000 population in Addis Ababa to 0.01 per 1,000 population in the more remote region of Afar, and the health worker density has ranged from 2.7 per 1,000 population in urban areas to 0.24 per 1,000 population in rural areas (Jhpiego 2019). As turnover rates are higher in rural areas, the motivation of health workers to remain in less attractive places needs to be increased.

4.4.1.1 *Retention policies*

Ethiopian health policy recognises that the retention of health workers is one of its main obstacles when it comes to HRH, and especially when it comes to rural areas (Ministry of Health 2015). Outside of a few urban centres, many places in Ethiopia suffer from infrastructural underdevelopment, and as the country remains largely rural and have few economic resources, developing rural areas have remained a challenge. Many health workers are reluctant to move to or remain within these areas (Deressa and Azazh 2012). The draining of the country's health workers, especially physicians, further compounds this problem. According to Tamrat (2019), the physician emigration from Ethiopia has seen little change over the years. This indicates an ineffective policy focus. However, the recognition of the problem of health worker migration throughout the many policy documents also shows the persistence of the issue, and that it is a difficult thing to solve.

Poor motivation, performance, and retention of HRH management, often with regional and urban-rural disparities, are a part of the problem, as these issues may affect the support mechanisms for the health professionals. Ineffective management becomes a challenge to HRH policy implementation and consequently also retention

(Manyazewal and Matlakala 2017). The HSTP recognises that there is a lack of modern human resource management concepts and practices, such as inadequate technical skills among the human resource staff, limited practices and capacities in strategic and operational planning and budgeting, and major gaps in performance management and accountability, among other things (Ministry of Health 2015). Human resource management functions are instead often constrained to personnel administration tasks, which effectiveness consequently are limited. The role of hospital HR departments is chiefly the recruitment and transfer of employees, helping employees upgrade their education, ensuring the employees work efficiently, and the payment of salaries.

While it in the HSTP is recognised that mechanisms for staff motivation and retention have to be institutionalised if they are to last, few mechanisms for retention are outlined. However, some specific mechanisms are described. One policy that aims to improve the retention of health workers is to allow regional and federal public hospitals to open and run a private wing in the hospitals. While this is related to health care financing, the primary objective is to reduce the attrition and absenteeism of public health workers. The HSTP reports that this has shown positive development, and mentions being especially effective when it comes to senior staff (Ministry of Health 2015), who often leave for better employment opportunities elsewhere. In general, the ability to dual practice – whether in a private wing of a hospital or elsewhere in the private health sector – allows physicians and other health professionals to maintain their affiliation to the public institution they work at while augmenting their salary in the private sector (Derbew, Laytin, and Dicker 2016).

Another policy that falls within the retention sphere is the compulsory service period for physicians and other government educated health workers. For physicians, this service period follows after both the undergraduate medical degree and the postgraduate training. This is referred to as cost-sharing, where the government pays for the education and the health worker pays this back through working. This aligns with what a lot of academics have suggested to combat the negative effects of brain drain, as discussed in chapter 1. After finishing the internship of the undergraduate medical degree, all medical students in public medical schools are required to work for 2-5 years as a general practitioner in Ethiopia (Kelly et al. 2019). The length of the service period depends on the area they work in, categorising areas into either A, B, or C, from least rural to most rural. Capital cities of the regional states as well as Addis Ababa are A,

requiring 4-5 years of service; B refers to areas that are further away from the urban centres and require 3 years of service; and areas in the C-category are completely rural and only require 2 years of service. Among the respondents, most had served in areas in the last category. The alternative has been to pay the government back for their education. This used to be 470,000 Ethiopian birr (ETB), but had just been reduced to around 70,000 after a nation-wide protest movement and strike by young physicians. The reduced sum is still much more than what people can afford, however. Without either the service or the payment, medical graduates do not get their medical certificate and therefore cannot practice medicine. After their residency, physicians are required to work for the institution that sponsored their residency for double the number of years they spent in their residency. Some programmes are three years, requiring six years of service, and others are four, requiring eight years of service. They can also pay 500,000 ETB to get their qualification immediately instead, which very few are able to afford. After this, their mobility is no longer limited and they are free to move wherever they want. Many choose to stay in Ethiopia after this time as most other countries require foreign physicians to redo much of their education. However, many at this time move to a large urban centre, such as Addis Ababa. Thus, while the compulsory service period ensures a supply of physicians to rural areas, it has been unable to retain them there after the period is over.

Counteracting the utilisation of the few physician resources Ethiopia has, however, the government halted their practice of deploying medical graduates to their service stations upon the completion of their internship. This happened after the strike. From then on, all physicians had to find employment themselves, which many have reported as being a difficult task – especially more so during the Covid-19 pandemic which limits travel (Mekonnen 2020).

4.4.2 Local retention strategies at JUSH

JUSH and other health service deliverers are policy implementers, not policy makers. Yet, there are certain things they are able to do to attempt to retain health professionals as long as their budget allows it. This is a result of the decentralisation of health services which accords the local levels and service implementers some authority and power over the use of the resources they are allocated, although limited. All public workers' salaries are decided centrally, however, the hospital decides upon duty

payment, which is extra payment for the hours someone works when they are on call. Furthermore, the hospital also works to retain health professionals through providing non-monetary forms of compensation, such as housing and transportation for the specialists. In Jimma, housing is located in a gated community right behind the hospital, which means that those who live there are not dependent on transportation and that they do not have to spend money on rent or other utilities. However, as several respondents pointed out: there are not enough houses. If the hospital were to employ more physicians, they would have to rent accommodation elsewhere. This accommodation also do not extend to other health professionals outside of the physicians, nor does it cover residents to a large degree. Some residents are also provided with accommodation, but these are only available for senior residents and can only accommodate one person. For those who have a family, this is therefore not an option. Other health professionals, who are paid considerably less than physicians, are not provided with housing.

Nurses, for example, have a high degree of turnover. A nurse who had previously been the nursing and midwifery director said that when he held the position, the hospital attempted to stop the attrition of nurses in various ways, but it had little effect. Among other things, the hospital sponsored the further education of several nurses who worked in the hospital. Frequent short-term training were also planned, during which time the participants would be paid. Additionally, they planned three-month work trainings in Addis Ababa for specialisations. The hospital would pay their salaries and arrange their transportation. In Jimma, the nurses were also offered transportation. During his time as the director, he discussed the opportunity to build apartments for nurses with the hospital board and the vice president for business and development. Yet, nurses continued leaving, citing better income or better jobs as the reasons. He estimated that among the nurses who worked in the hospital two years ago, 50% have left.

The CED of the hospital had only recently come into the position at the time of this research. Already, he had started to gather all specialist and sub-specialist physicians in the hospital to discuss solutions to the problem. He said that "you don't want to just listen to their problems and just leave; you want to give them a solution. But that solution is not easy, ok? It's not something that you can solve at the hospital level." He continued by saying that providing housing and transportation is not enough.

All stakeholders, from the Ministry to the hospital need to sit down and come up with a strategy, wherein everyone is heard.

The HR director brought up another measure the hospital can take that may help prevent attrition. Some health professionals do not live with their families for various reasons. When it is possible, the HR department may assist with bringing their spouse to Jimma, which removes one pull factor, and instead may create a stay factor as the family is gathered in one place. Among the respondents, being apart from ones family was brought up as a reason for planning to leave.

When asked what the biggest challenge to retain more people is, the HR director said that the main problem is money. Hospital budgets are decided centrally, and are limited due to the financial context in Ethiopia. In 2018, the health expenditure per capita was USD 24.23 (World Bank n.d.-b), which was 3.3% of the GDP. This is far below the international norms and recommendations for health expenditure (Fagan, Lang, and Lee 2019). Comparatively, the world average in 2018 was USD 1,110.84 (World Bank n.d.-a). The Ethiopian health budget for 2020-2021 was increased by 46% as a response to the Covid-19 pandemic, however (Cepheus 2020).

Other research suggests that rural placements as a part of the undergraduate medical curriculum may positively influence students' intentions in favour of working in a rural area. While students from rural areas have been shown to be more likely to want to practice in rural areas than students from urban areas (Deressa and Azazh 2012), students with an urban background have also been shown to be positively influenced toward rural practice after working for some time in a rural area (Tolhurst, Adams, and Stewart 2006; Dalton, Routley, and Peek 2008). Silvestri et al. (2014) found that medical students from Africa and Asia who planned to practice rurally were less likely to go abroad. They found that the likelihood of wanting to practice rurally was positively correlated with how much time they had spent in rural areas.

Kizito et al. (2015) found that medical students in Makere University in Uganda were less likely to want to leave the country than students from other universities, and they hypothesise that this is because they have a more community-based curriculum that requires the participation in community-based education. Jimma University also has a community-based education component in its medical education which requires the undergraduate medical students to go out to the rural community, where they identify

community problems and suggest practical solutions. However, when asked if he thought it had an effect on the retention of physicians, a specialist said that he did not think so. Today, the needs of the physicians have changed; they require more modern amenities and infrastructure than can be found in rural or infrastructurally underdeveloped areas. Likewise, while many work in rural areas during their compulsory service period, most seek to find employment elsewhere once they are free to move as they wish.

4.5 Conclusion

This chapter has been two-fold. First, I have demonstrated that the scope of health worker migration – both external brain drain and internal turnover – is significant. While more research is needed on these topics, it is clear that the scope of health worker migration – both external brain drain and internal turnover – is significant. There are already a high prevalence of planning to leave the country among students, and although many do not leave in the end, the fact that so many already want to leave then is concerning. When it comes to graduated health workers, these studies found overall high intentions to leave among all groups, or they found overall large turnover rates. Moreover, the evidence suggests that JUSH and the surrounding areas struggle more than elsewhere. When especially the most able leave, both from places like Jimma and from rural areas, this poses a serious question about the quality of care and training for people who follow. The first step to create effective policies to increase retention – both locally and nationally – and stop brain drain may be to conduct an extensive study on the demographics of those who leave and those who stay, and, most importantly, identify why these groups stay and why others leave. A systematic country-wide study may therefore be useful to better be able to compare.

Second, I have shown that the Ethiopian government and the Ministry of Health recognise that the difficulties in retaining health workers is a threat to the health system. The low retention and motivation of health workers fall underneath the larger problem of HRH shortages. Ethiopia has a long way to go to reach international HRH goals, and especially rural areas are underserved. However, the country is working towards increasing the number of health workers drastically, and has implemented task-shifting policies to mid-level health professionals to increase the rural population's access to a wider array of health services, although critics argue that this is still not enough to reach

health goals. Furthermore, Ethiopia has implemented some retention policies, and while it is difficult to measure their effects, the access to private sector dual practice opportunities shows promise as it allows health workers to bolster their income where the government is unable to provide higher salaries due to the financial constraints of the national economy. The compulsory service period helps supply the peripheries with people with skills who otherwise would have chosen to work elsewhere. However, this leads to high turnover as few choose to remain after the period is over. Here, employers may seek to provide both monetary and non-monetary means of compensation to both attract and to keep health workers. Yet, these retention strategies are in many cases not enough if the location of the health institution has few other attractions. Moreover, these retention strategies favour physicians and neglect other health worker groups, such as nurses, who also are necessary to operate the health system.

Chapter 5: Push, pull, and stay factors in Ethiopia: why some leave and some stay

Brain drain is generally analysed in terms of push and pull factors. Pull factors draw people towards a destination, whereas push factors drive them away from where they are. Their destinations or origins may be for example a country, a region, or a sector of the economy. These push and pull factors may be both external, meaning more systemic factors coming from outside the individual, and internal, meaning personal considerations. When deciding on migration, these factors influence each other (Blacklock et al. 2014). Dohlman et al. (2019) have reviewed the literature on motivational factors leading to the migration of physicians, and found that the picture is multifaceted. Their findings illustrate the need to account for "stay" factors as well to explain why some people stay despite several factors pulling on them and pushing them away.

In this chapter, I will discuss why people leave and why people stay, with reference to points raised by the respondents. This chapter compares the context in Ethiopia to situations that have been found to affect brain drain elsewhere in the world. First, I discuss financial security, which in both the literature and among the respondents emerged as one of the most important factors that influence brain drain. Next, I look at the work environment, which among the respondents were of equal importance to financial security, although to different people. Work environment encompasses several factors, and here I discuss those pertaining to resources, workload, management, and physical security in the form of the threat of disease transmission. After this, I look at factors of educational and professional development, the importance of social and cultural networks, and how people are influenced by other health workers leaving. I then show the importance of altruism, or caring for their communities and the poor. This was for many an important reason for staying in Ethiopia. Next, I look in more detail at an issue that specifically pertains to nurses, which is the low recognition of nursing as a profession in Ethiopia. Last, I discuss freedom of expression and fear of prosecution.

Push	Pull	Stay

• Lack of financial security, low salaries
  - A lack of dual practice opportunities
• Bad work environment
  - Few resources
  - High workload
  - Conflicts with management and poor management practices
  - Threat of disease transmission
• Fed educational and professional development opportunities
• Low recognition of nursing profession
• Limited freedom of expression and fear of persecution
	• Better financial security, higher salaries
	  - Dual practice opportunities elsewhere in the country
	• Work environment
	  - More resources
	  - Lower workload
	  - A safe working environment
	• Better educational and professional development opportunities
	• Influenced by social and cultural networks
	  - Hearing about better working conditions from ex-colleagues
	  - Friends and family live abroad
	• Freedom of expression
		• Financial security: private sector opportunities for dual practice where they are
		• Social and cultural networks
		  - Knowing the culture, religion, and fitting in
		  - Want to be close to family
		• Altruism, contributing to development

Table 1: Summary of push, pull, and stay factors

5.1 Financial security

One of the main themes that emerged both among my respondents and in the literature is the need for financial security. Even in the cases where it has been found to not always be the most important factor for migration, financial insecurity undoubtedly has a significant influence on people's decision to emigrate. This factor becomes both a push and a pull factor; low income in the countries of origin and the promise of higher income in the destination countries are two sides of the same coin (see for example Dohlman et al. 2019; Burch et al. 2011; Imran et al. 2011; Okeke 2013). Exploring a government-offered bonus stipend to physicians in Ghana, Okeke (2014) found evidence that improving physicians' income may help retain them. However, some data also suggest that financial incentives do not affect intentions to migrate to the same level in countries above a certain income threshold, and that some of the poorest countries in Africa have had very low levels of physician migration (Clemens and Petterson 2008; Dohlman et al. 2019).

Almost every health worker I interviewed brought up financial insecurity and low salaries as something they were discontented about. Only one person said that she does not mind the salary; the rest thought it was inadequate. It was also the principal reason given for wanting to leave either Jimma or the country, or given as the main reason why their peers and/or seniors had left. While several respondents said that they know that the government is unable to increase the salaries due to the economic situation in the country, this did not influence their likelihood of wanting to stay. People earn much more working in the private sector or for an NGO, and some respondents mentioned that within other fields and outside the public sector, people with only a bachelor may earn more than a physician working in the public health sector do. A resident noted that he had high school friends who had quit school and were still living much better lives than him; making more money, having their own cars, and their own houses. Public sector work in Ethiopia is generally not very lucrative, and the salaries are often low across all public sectors. Salaries are also decided by the central government, which means that the local places of employment, such as JUSH, are not able to increase the basic salary.

However, some payments they do control. The residents' salaries, for example, are decided by their place of employment or by the institution that sponsors them. At Jimma University, I was told they earn somewhere between 7,000 and 8,000 ETB per month, while one resident whose residency was sponsored by another university earned 10,000 ETB. The rest are centrally decided, however. Most of the specialised physicians, i.e. those who have finished their residency, earned 13,000 ETB, while those who had sub-specialised earned around 16,000. Professors also earn a higher salary. Nurses, on the other hand, earn much less and are not provided with housing, unlike physicians who work at JUSH. A nurse with a BSc has a salary of 3,653 ETB per month, which is the same as laboratory staff. Pharmacy workers are one rank up and earn 4,446 ETB per month. In Jimma, I was told by some that are not provided with housing by the university that they pay around 3,000 ETB per month in rent, which comes in addition to transportation costs for those who live away from the hospital. Most people do not own cars as they are expensive, and instead rely on either line taxis (which are converted minivans that run across a set route) or *bajajs* (which are three-wheeled vehicles often known as *tuk-tuks* in other parts of the world). These are both cheap modes of transportation, but it may quickly add up. A resident who had to rent

outside the university-owned accommodation said that "I don't want to think about rent when I'm working in the O.R. I don't to want to think about my family's health when I'm working." However, physicians earn far more than for example teachers, who I was told earn around 3,000 ETB per month. Industrial workers may earn even less, for example between 1,500 and 2,500 ETB per month in the textile industry in the capital.

Even though it is more common for those who have not specialised to go abroad, a respondent said that some specialists go abroad even though they have to redo their specialisation, largely for financial reasons. A resident said that he would leave the first chance he could, but come back to Ethiopia and finish the compulsory service to have his medical license once he had earned enough money to live comfortably. In exit interviews the hospital organises with staff who leave, low pay was given as one of the top three reasons for why they left their jobs at JUSH. For nurses, the low salaries, in combination with the low recognition and development of the nursing profession, lead to high attrition rates, as many leave. If they cannot find well-paying jobs in the private sector or are unable to or do not want to leave the country, many end of leaving the profession entirely.

5.1.1   Dual practicing opportunities

Because of the low salaries, many feel that they have to bolster their income by dual practicing in the private sector outside of their normal work hours. On a country-basis, including in rural areas, 1 in 5 physicians has reported dual practicing (Defaye et al. 2014). It is a common practice among physicians across the world, including in high-income and resource-rich countries, such as the UK and Norway (McPake et al. 2016). In a study among physicians in Tigray, all the physicians who dual practiced did so to supplement their income (Abera, Alemayehu, and Henry 2017), which was also the only reason given by my respondents. One respondent said that the public health sector and JUSH "have not significantly improved in payment in comparison to the private sector in Addis [Ababa]" or in comparison to the private sector in other urban centres which has grown rapidly to the level of widely available private services. He stated that the relative lack of private-sector work in Jimma is a major reason why people move to Addis Ababa or to other urban centres, where the private sector is much larger and it is much easier to find additional work. Yet most people I talked to said that dual practice is very common, and about two thirds of the respondents who were clinically employed

dual practiced to some degree. This differed between the different specialities, however, and I was told that it was especially common in surgery, internal medicine, paediatrics, and gynaecology. While it is common, however, there are fewer private opportunities in Jimma than in similar places elsewhere. There was only recently established a private hospital, and starting your own clinic is for many too expensive, which means they may work in other people's clinics or much less than they would like to do.

Nevertheless, while many of the respondents did some dual practice in the evening, many said that it is a somewhat bitter-sweet trade-off between spending time with your family and providing financially for your family. A physician said that he was going to a private clinic after his normal workday ended on the day of our interview because the public sector salary is so low; however, he only rarely practices in a private clinic because he would rather give his time to his family. Another respondent said that most of the laboratory staff, including himself, work in the private sector during their off-hours. He said that the trade-off between spending less time with your family in order to bolster your income was worth it; the extra money covered rent, and allowed him to support not only his wife and child, but also his sister who was in school. Another physician said that while he dual practices sometimes, he did not currently spend a significant amount of time in the private sector. He would rather spend his free time on for example community or church activities, or being social. Some dual practice often, however. A specialist said that generally, his workday is from 8 am to 8 pm, as he works evenings in a small private clinic he owns. He said he often is not home until 10 pm, by which time he goes to bed and then does the same thing the day after. Among nurses in Jimma, I was told that dual practice was relatively rare, although the recent opening of the new private hospital opened up further possibilities for private employment. For a few respondents, this trade-off between spending time with family and being able to provide financially for them made them want to leave the country in order to earn a good salary without giving up their spare time.

5.2   The work environment

However, a respondent said that most people do not leave for financial reasons, and that "even though the payment is very low, if the work environment is adequate enough or fair enough to spend or stay within, we prefer to work in [a] safe and well-established

environment." While financial security undoubtedly is important, the work environment was brought up by almost the same number of people as a reason for wanting to leave. Several things affect the work environment negatively and consequently serves to push people away. Here, I will deal with some of these factors that were brought up by the respondents as demotivating. These things include a lack of access to resources, a high workload, difficulties in dealing with management, and the threat of disease transmission.

5.2.1 Resources

As health care is a resource-intensive activity, resource scarcity is a widespread problem, not only in LMICs. However, the resource-scarcity in poor countries is much graver than in HICs, as the label suggests. Resources are defined as money, HRH, time, equipment, beds, operating rooms, infrastructure, and medicines. Burch et al. (2011) found that all of the medical student respondents from five sub-Saharan African countries[5] cited a lack of access to medical equipment and technology as a reason for wanting to leave Africa to practice medicine elsewhere. The lack of especially physical resources was brought up as a challenge by almost all of my respondents as well, and many said that this was one of the reasons they considered leaving the country, or it had contributed to why their friends and colleagues had left. One person said that there are shortages of different supplies, resources, sometimes manpower, "and this really affects what you are [able] to do." Another respondent said that medicine is a modern field, and all aspects should be modernised, however, in "this set-up, the infrastructure is not adequate enough to teach all the skill needed [and] everything is not arranged to optimise the treatment. […] I don't feel I have been trained to the best of the medicine." Later in the interview, he said that the infrastructure is one of the main problems and that it significantly impedes health workers' ability to serve the patients, mentioning that especially the laboratory is not of high enough standard to support diagnoses efficiently. Essentially, he did not feel like he has enough resources to treat his patients. Another physician also said that infrastructure is the main problem, and that "the investigations are not available, the OR table is not available or may not be functional. The anaesthesia machine may not be functional. Even the oxygen, the cylinder may

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[5] The Democratic Republic of Congo, Kenya, Nigeria, Tanzania, and Uganda.

sometimes be empty." The difficulty of conducting investigations for diagnoses was brought up by more than half of the health worker respondents.

Defaye et al. (2014) conducted a nation-wide survey on the experience of Ethiopian physicians with bedside rationing where they found that almost 9 out of 10 study participants often regretted their choice of profession due to the resource scarcity. 54% of their respondents reported having seen patients who they estimated to have died due to a lack of resources. This was echoed by many of my respondents. A resident talked about watching patients die due to a lack of resources, stating that this "is a big trauma to the physician." She said that while the hospital is huge, there is not adequate equipment to treat everyone who needs it. She asked why they are building the new massive administrative building on campus when they are not even able to maintain the machines necessary to keep the entire ICU up and running; only three out of six beds in the adult ICU were currently in use due to the machines not being functional. She said that some of her friends had more or less exited the profession just after graduating as they found the resource-scarce system too traumatic too work within. Instead, they only did charity work in clinics and with helping homeless people. Another respondent said that sometimes they have to prioritise between patients if there are not enough operating tables. When asked if he thought he or any of his friends would quit, a resident said, "most of the time, *every* day, after long night shift hours." A common problem is a lack of medicines, and often patients have to go outside the hospital to buy what they need at a private pharmacy. Because the pharmacies are closed at night, they have to wait until the next day "and some of the patients may not wait until the next day." Another resident said that it is being able to save lives that give him satisfaction with his job, so when he loses a patient because the hospital does not have a cheap and common drug available, or lacks the necessary infrastructure and availability of investigations, "I'm gonna feel bad, I'm gonna feel worse, I might even cry. It's not good to live in such kind of environment." He stated that someone might diagnose an easy to treat disease, "but there is not enough investigation or enough human power to treat a patient."

Most of the respondents said that they often had to improvise in order to treat their patients due to a lack of necessary resources. Livingstone (2012, 6) argues that "improvisation is a defining feature of biomedicine in Africa." The ability to practice medicine is contextual, and everywhere medicine has to be tailored to suit the specific situations that come up. This was often stressed by several of my respondents as well. A

nurse respondent said that it is necessary to improvise in order to improve the quality of the service and that "the principle in nursing says that you have to be creative." Several people emphasised that saying that they are unable to treat a patient because they do not have the most efficient resources for the job is not an option, and that they have a moral responsibility to look for another solution. Despite being educated in the most up-to-date treatment methods, many physicians said that they use old and outdated methods and treatments out of necessity, and that health workers need to adapt what is in the textbooks – often written for resource-rich contexts – to the local situation. At other times, they need to adapt by being creative in the use of what they have at hand. One person noted that "you have to adjust according to situations. You need to use your creativity, because if you want to do it by the book, it's not possible." Some said that they had to use instruments that are meant for other purposes, but it is the only thing they have available, so they make do. For example, one respondent said that if there are no nasal plunges available for patients who need oxygen, they create one. Another person said that sometimes they have to use rectal tubes or catheters as test tubes. Moreover, someone else pointed out that they often do not have access to "fancy investigations like MRI and CT scans," or that it might be too expensive for the patient to utilise. Instead, they might for example rely on physical examinations, the history of the patient, and X-rays.

There are also shortcomings in HRH. At the time of my fieldwork, Jimma lacked several sub-specialities, such as neurosurgery, orthopaedic surgery, and cardiology. Patients who need these types of procedures have to travel to Addis Ababa or elsewhere for help. This is not uncommon in low-resource settings. In general, one physician expressed her frustration with the lack of resources and treatment options, and said that patients often do not want to be referred "because they have to take the bus, they have to pay accommodation, they have to pay for their expenses. So they usually have to go home." Moreover, almost all of the respondents said that their department was understaffed. A respondent pointed out that many of the physicians would rather overwork themselves to see all the patients, because many cannot afford to stay the night in Jimma and they are not ill enough to be admitted to the hospital. Another physician said that as a doctor in Ethiopia, you are not only treating the patients, "practically, you are also [a] social worker." Many of the patients are not only poor, but also illiterate, and may require more help than others in navigating the health service.

This, he said, is not part of the medical education curriculum, but it is something that you learn from observing your seniors.

One issue that repeatedly came up in conversations about resources was the public sector procurement system in Ethiopia, which extends beyond the medical sector to all the other public sectors. There are several methods of procurement, but to combat corruption, the government utilises a system of open bidding, which takes 90 days. This procurement method is meant to facilitate open competition and lower prices. Other methods of procurement, such as direct procurement from a single supplier, would allow the buyer to deal directly with the supplier and get the product instantaneously. However, this means higher prices as the supplier is free to set the prices however they want, and it may open up for corruption. Furthermore, some suppliers hide their supplies from government suppliers and instead sell their products on a growing black market (Savedoff and Grépin 2012). This means that the value tax is not added, and the black-market seller can ask whatever price they want, for example for insulin, which is a scarce resource. The consequence of this is having to make the decision between the lives of patients, in which one buy through a non-government procurement method, or combating high prices and corruption through utilising the open bidding system.

The health workers complained about the process often taking six months, and some mentioned having had to wait a year for something. One respondent said that there is an additional problem when they have waited for a very long time for something, and then a low-quality item arrives from China. He gave the example of receiving a blood pressure machine that only measured the blood pressure of three patients before it broke. One physician said that he thinks the government allocates a reasonable budget for the health sector considering the available financial resources in the country, however, the procurement system is a larger system problem. For example, if the oxygen plants got stuck, he said, and the problem is that one screw needs to be replaced, it may take months to fix as one would have to go through the government's procurement process, by when the patient may have died. Several of the respondents mentioned that some health workers pool together their money to buy what a patient may need from a private pharmacy outside the hospital, who does not have to go through the same procurement process. Other times, the patients may have to buy it themselves or for example go to a private laboratory, which is far more expensive than the fees they pay in a public hospital. Another physician said that while this is a system

problem, many health workers do not seem to understand that it is not the fault of the hospital, and that these people do not understand that if someone breaches the procurement protocols, they could go to prison.

A respondent said that there is corruption in this system. He said that,

You can do a [complete blood count] for 50 [ETB]. […] But the laboratory person, might make the machine fail or not work, so that the patient has to go outside. […] So that the person who is establishing the laboratory outside [the] hospital is going to pay the person inside the hospital.

He said that this was going on in the specialised hospitals as well, and that people were doing it purely for the sake of money. He continued by stating that there is a lack of will to solve problems because someone may gain from something remaining broken. For example, if an MRI machine remains broken for a long time or the hospital goes without one, it may be because someone with decision-making power have shares in a private hospital. Savedoff and Grépin (2012) have previously reported that pharmacists and other health care professionals have referred patients to the private sector or diverted supplies to the more profitable private practices. However, while corruption has been a pervasive problem in Ethiopia, which has also been admitted by the government (International Crisis Group 2019), corruption in the public health sector has been relatively minimal compared to corruption in other countries' health sectors or in other sectors in Ethiopia. "However, rapidly rising expenditures, a growing private sector, concentrated procurement, and new financing arrangements could increase the sector's vulnerability to corruption in the future" (Savedoff and Grépin 2012, 20).

Another procurement problem is the general lack of foreign currency in Ethiopia, which limits Ethiopia's access to the international markets, coupled with a devaluation of the Ethiopian currency, the ETB, making foreign currency more expensive. In the open-bidding method of procurement, the health care providers do not directly communicate with the international suppliers; instead, there are agents between the hospitals and other health care providers and the international suppliers. The head of procurement and property at the hospital said that one reason is the limited amount of foreign currency, and if this is given to the institutions themselves it may be misused to import other things. As a whole, Africa is heavily reliant on the importation of

pharmaceuticals, and between 1% and 5%[6] of the pharmaceuticals consumed on the continent are produced there. Ethiopia has a small production of pharmaceuticals, but they are far away from being self-sufficient (Coutinet and Abecassis 2018). Furthermore, this does not account for other necessary resources in the health system, such as computers and lab machines.

5.2.2 Workload

Many of the respondents considered the workload to be a considerable problem, noting that in addition to serving the patients, they also need to find the time for paperwork to and follow up on everything else that needs to be done. Many of the respondents also said that it was difficult to find time for doing research. The lack of resources, including HRH, also feed into a higher workload, and many reported that they had to spend more time on each patient by improvising or looking for other treatment options. Several respondents noted that this, in combination with the low salaries, had caused some of their friends to leave. A few respondents also said that the high workload was making them consider finding a job elsewhere – either in Ethiopia or outside of the country – where they would have a lower workload. High workloads have also been found as push factors in other countries, such as in Kenya (Brownie and Oywer 2016) or Lebanon (Akl et al. 2007).

A surgeon said that they serve everyone who come to the hospital, leading to a very high workload. When spending a long night operating many patients, it affects their concentration. He said that sometimes, he just wants to "abandon all this, and just get out and live a very simple life." A resident who was working in the chronic follow-up clinic said that she sees too many patients each day, reducing her ability to evaluate the patients properly. Efficient time use was impacted further by having to use a computer, with which she did not feel competent enough. Some of the respondents were the only sub-specialists of their type working in the hospital, which also impacted their workload. This also meant that they would be on call every day of every week, unlike those who shared the burden of the job with someone else. One physician said that she would often work unpaid outside of the normal working day because she was concerned

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[6] Only Morocco and South Africa produce a large proportion of the drugs they need, around 70-80%.

with seeing each patient as quickly as possible, reducing the time they would need to spend in Jimma, and consequently the money it costs to stay away from home.

For residents and interns, the workload is at times even higher. Four to seven times per month, or minimum one time a week, residents and interns have to work 36-hour duty shifts. At these times, they work the normal day shift, the night shift, and then the day shift the next day, without a break. Many residents complained that this was not only exhausting, but it also put the lives of the patients in danger. One physician who had recently finished her residency in obstetrics and gynaecology expressed relief at no longer having these shifts and said that "it is not safe! It's not safe for the physician, it's not for the mother, even. So the exhausted physician will not give the appropriate care." Another resident said that unlike in other universities, they are not getting paid fully for these duty shifts. He said that they are told there only is payment for three residents per night, however, there are seven or eight residents on duty. One of the respondents also said that with the amount of time they spend working, they find it difficult to find time to study. Another person said that "residency and internship is like slavery." This was one of the reasons why young physicians and interns protested and went on strike in 2019.

5.2.3   Management

Another frustration that often came up was with management. Many respondents reported spending a considerable amount of time following up on issues between the health staff and the administration and management. One physician said that he is very busy with following up on issues that "should have been [the] business of the hospital leaders, and the country's issue," and that he felt like he was wasting his time on this, rather than spending time on reading or revising protocols. He found that focusing on professional development consequently was impossible. Another physician said that he does not have time for himself or for his family. Moreover, he said that unlike the university academics, the physicians do not have time to "ask for our rights. Because we are engaging [in] activities which is always continuous and do not give you time – even sometimes to think about yourself."

In a study on intentions to leave among health professionals in public health centres in Jimma Zone, Kalifa, Ololo, and Tafese (2016) found that organisational

management significantly factored into why people wanted to leave. Problems with management have also been recognised as an issue in official policy documents (Ministry of Health 2015). Among my respondents, several physicians indicated a friction between the management and the health staff. While they did not differentiate between the technical support staff and the support unit staff, it is likely they were referring to the latter, i.e. not clinical staff. One physician said that this problem is found in most public health institutions, and that "if you try to help people, [the management] won't be on the side of you, to help." This was echoed by another respondent, who said that the administration "don't agree with what you suggest. They simply order you to do something which is not medically accepted, or is a good thing [morally]." Both respondents had experienced what they thought were undue cancellations of operations. Other respondents felt like they were spending far too much time fighting with the leaders to advocate on behalf of their patients. One person complained about the administration at the top, echoing what several others expressed. She said that there is

> low support for the clinical service, no recognition for what you are
> doing here. No one recognises what you are trying to improve. And
> there are lots of scarcities in the wards, in the units, but they don't
> understand when you explain for them. So that makes me – that
> decreases my happiness or interest for my work also.

On the other hand, the HR director said that often, workers do not work as needed, or they disappear without saying anything. Another challenge, he said, was when department heads challenge you. Because of high turnover, there are often new leaders, which means that the management have to go through the same conflicts several times. He said that they do not understand the manager system and style as they are physicians, not managers, and that they do not understand the policy. Therefore, friction arises.

5.2.4 Threat of disease transmission

Some respondents said that they at times found the physical work environment to be unsafe. A resident said that most people do not leave for financial reasons, and that "even though the payment is very low, if the work environment is adequate enough or fair enough to spend or stay within, we prefer to work in [a] safe and well-established environment," referring to the safety issue of disease transmission, among other things.

In the literature, the threat of increased disease transmission, such as the AIDS epidemic in sub-Saharan Africa, has been mentioned as a push factor (Bhargava and Docquier 2008; Dohlman et al. 2019). While few of my respondents outside of the resident specifically mentioned it as a reason for wanting to leave Ethiopia, some brought it up as one of the things they disliked about working in the Ethiopian health system. Health workers at the hospital do not have health insurance as part of their job, and some mentioned the costs if they were to become ill. A resident talked about the safety issue of exposure to biohazard materials and the dangers of catching a communicable disease. He said that due to the lack of health insurance, every physician has to pay out of their own pocket or get credit from the bank in order to pay for a potential treatment. One specialist specifically talked about her fears of bringing anything she got exposed to when treating patients home to her children, and mentioned exposure to HIV and Hepatitis B as two examples. When asked what she dislikes about her job, she said that,

> It's the exposure; it's a bloody business. So you might get exposed to many infectious things, to the blood, to the amniotic fluid, to any discharge. That thing is not comfortable for me, and also I take some blood with me to the home, to the kids. That thing worries me.

5.3   Educational and professional development

Many of the respondents said that the high workload, combined with the limited access to resources, limits their ability to professionally develop themselves. In their review of the literature on motivations that drive physician emigration, Dohlman et al. (2019) found that the lack of job satisfaction in the country of origin and the greater career and research opportunities abroad were often given as reasons for leaving or wanting to leave (see for example WHO 2010; Sheikh et al. 2012; de Silva et al. 2014; Bojanic, Bojanic, and Likic 2015; Kizito et al. 2015). Among nurses in South Africa, Katamba (2011) found that a lack of career prospects had a strong connection to intentions to leave. Likewise, in East Gojjam in Ethiopia, Getie, Betre, and Hareri (2015) found that nurses who were satisfied with promotions were much less likely to want to leave than those who were not. The same point was echoed by a nurse respondent in my study who stressed the importance of continuous professional development to create a stay factor in the institution.

Among my respondents, some also talked about leaving to become better physicians, before returning to Ethiopia when they felt that they had gained the competency to better help their people. One resident said that he would go to the US tomorrow morning, if he could, "because I want to be someplace where there is the best equipment, the best teachers, the best colleagues. […] I want to be competent with others." In Dohlman et al.'s (2019) review, they found that many of the respondents of the different studies planned to leave only temporarily in order to acquire new knowledge and skills they were unable to obtain at home. This plan was also held by many of my specialist respondents who had not sub-specialised yet, or by the nurses who wished to pursue a PhD, for which there are few opportunities in Ethiopia. One nurse I interviewed, who was pursuing a PhD in a sandwich programme between Jimma University and the University of Oslo in Norway, had an ambition to improve nursing in Ethiopia. "It is the plan, maybe when we finish our programme, we can open [a PhD programme], or prepare the curriculum."

Because there is a lack of sub-speciality opportunities for physicians in Ethiopia, many of the respondents had gone abroad to study before returning to Ethiopia. None of those I spoke with who were planning to study in another country intended to stay abroad. Other studies also suggest that this was not likely to be the main motivation for permanently leaving their countries of origin (Dohlman et al. 2019). However, one respondent pointed out that it has become easier to specialise or sub-specialise in recent years compared to previously. This is likely partly why about half of my respondents felt they were able to professionally develop themselves to the degree they want in their current job.

However, the remaining respondents thought it was only partly possible or not possible at all to develop themselves professionally, largely due to the lack of resources and a high workload that left little time for research. One head of a department said that they were in need of employing more people within their department, because at the moment their schedule did not allow for research. Another respondent said that he spent too much time following up on laboratory, radiology, a lack of HR, and so on – everything that should not be his business as a physician – which in addition to a high patient load meant that he had no time for professional development. He said that if he had the resources he needed, including human resources, to help his patients, he would be able to do so. One physician said that because she has a lot of international research

collaborators, she is able to develop herself professionally when it comes to research. However, when it comes to the clinical side of things, she said no; she may be updated on the newest practices and is teaching that to her students, however, due to the low-resource setting they operate within, they cannot practice what they teach.

5.4 Social and cultural networks

In looking at people's need for social acceptance, Dohlman et al. (2019) found that having strong personal and family roots helps to retain health workers in their countries of origin. Having strong cultural and religious ties to one's community arguably falls within the idea of social acceptance or belonging, and in that way functions as a stay factor. Some of my respondents brought up family ties and ties to their culture as reasons for staying in Ethiopia. Among surveyed ophthalmologists in Africa, Nentwich, Schaller, and Klauss (2014) found that one of the most important reasons cited for considering staying in one's country was familial ties. In their review, Dohlman et al. (2019) found that it was especially female physicians that cited family ties as a reason for staying, while male and young doctors were more likely to want to leave. While some of my respondents expressed that they thought women were less likely to leave due to for example getting married younger, several of the male respondents also expressed that they did not want to leave, and several women expressed a wish to do so. When asked why he planned to stay in Ethiopia, a 35-year-old male specialist replied that he had had the chance to go and work in the West and the US several times, even recently, but that,

> I've not [got] any plan of going there. Because - it's not because I am getting something better here. But, actually, I am from around here. I'm living with my family. I think I have the basics. Life is not only money. […] I enjoy my job. But also [at] the same time, it is challenging. But you may get money, you may have a good house, whatever. But that's not all.

His reply was echoed by many of the respondents who did not want to leave Ethiopia, both male and female.

Even those who said they wanted to leave Jimma often wanted to remain in the country because they love Ethiopia too much to go elsewhere. One respondent said that she would not want to leave Ethiopia because she is comfortable where she knows the culture and the religion. "I should be here. I *belong* here." Among medical students in

Egypt who planned to go abroad for a period after their education, Fouad et al. (2015) found that the feeling of belonging was an important driver among those who wanted to return after some time abroad. Although this reason for staying was most commonly cited by the female respondents in my study, the sample size is too small to conclude whether this is gendered in Ethiopia. Moreover, the women who stated this as a reason for staying also said that their husbands shared their thoughts about and motivations for staying in Ethiopia.

Social acceptance and belonging may also have an effect on internal migration patterns. Deressa and Azazh (2012) argue that students with a rural background are more likely to want to practice in a rural area partly because of a familiarity with rural settings and cultural norms. On the other hand, most students end up practicing medicine in a rural area immediately after finishing their undergraduate degree. Because the years they have to practice before being awarded their license is much shorter here than in urban areas (2 years instead of 4 or 5 years), this option may be more attractive for many. Among my respondents, all those who had said that they had worked in Addis Ababa during the compulsory service period did so because they were from there and wanted to be closer to their family.

While the factor of social acceptance often prevents emigration, it may become more likely for someone who already has friends or family abroad, or for those who for example have a dual citizenship (Dohlman et al. 2019). Among the respondents, a few people brought up hearing about the better working conditions abroad from previous classmates or colleagues. A few also mentioned that their friends who left had been influenced by family or friends who lived abroad. One respondent had the opposite experience, however, and said that hearing about the experiences of his family who lived abroad discouraged him from leaving Ethiopia. His family found the lack of social connections within a society that they experienced as "colder" difficult. He said that while everything, such as food and housing, might be cheap, the social life abroad – specifically talking about the US – is not that great. Furthermore, he said that they experienced "the working conditions and everything" as dreadful. This also came up in a few informal conversations I had with people outside of the interviews.

5.4.1 Impact of emigration of colleagues

Relatedly, when health workers leave, it may also affect the emigration intentions of those who remain. Among medical students from six sub-Saharan African countries, Burch et al. (2011) found that 86% of the study participants who considered emigrating were influenced by hearing about positive experiences from health workers who had already left. Likewise, the majority of my respondents said that they had heard about there being better salaries and working conditions abroad from their classmates, friends, and ex-colleagues. While this information may not affect everyone, it seemingly served to influence those who were already thinking of emigrating more in that direction. A respondent who noted that more than half of his colleagues either had left or were planning to, said that everybody wanted to leave because of the unfairness of the system; the payment is too low and the workload is too high, which most had heard were better abroad.

Most of my respondents knew several people who had left the country. A nurse said that around half of the people he studied with at the bachelor level had left the country, with the majority living in the US. Furthermore, he said that few of those that had stayed in Ethiopia still worked in the public health system; some work for NGOs or private organisations and many others have changed professions. The majority of the respondents knew many people from their undergraduate education who had emigrated or who had left the public health service. The number of people who had emigrated varied greatly. In one physician's class, only 4 out of 47 had left, whereas another physician said that only one third out of a class of around 80 people remained in the country. However, the general estimate among the physician respondents was that about 25% of their undergraduate classmates had left the country. Among those who had worked in the hospital for some time, many also said that several of their colleagues had left over the years, although some of these had only left Jimma, but not the country.

Among those I interviewed, the residents were the group that were more likely to be planning to leave – either Ethiopia or Jimma. Among the respondents, residents were also more likely than their senior counterparts to be influenced to leave when either their classmates or their seniors had left. People who have finished their residency, however, often do not want to redo it abroad, as the length of their medical education already is very long. Those who have completed the compulsory service of six to eight years after their residencies are even less likely to leave the country. This

pull factor thus seemingly decreases with experience among physicians. A specialist said that,

> In the first couple of years, before I became specialised, it makes me to consider actually also going. My friends are gone, I could also go. I was thinking that. But as time passed, I changed my mind: I better stay. When I became more experienced and such things, my desire decreased.

His mindset was especially common among the physician respondents who had sub-specialised. At this point, going abroad would mean having to go back and redo years of medical education.

However, one respondent noted that while it is more common for general practitioners to leave the country, he had noticed that many senior personnel from Jimma also emigrated. This seems at odds with the general country trend. The respondent commented that "I don't see internists, surgeons […] leaving their country and going from other towns, but in Jimma I know a lot of them: surgeons, internists, gynaecologists, going to the United States, leaving their speciality." This phenomenon should be researched in more detail.

This pull factor also seems to have little effect among those who are strongly influenced by the stay factor of social and cultural networks. For people who for this reason have little interest in emigrating, hearing about how things are better elsewhere may have little effect. A specialist who said she loves Ethiopia far too much to ever consider leaving said that her friend left for the US, where she now works as a nurse. Her friend is earning "enough money, and she [has] her own house. She took her husband from here, she took one of her sisters there. And she had one baby recently. And she said she is so much more comfortable. I am glad that she could make this way." However, the specialist said that while she has suffered a lot and deserve more than what she gets as a physician in the public health system in Ethiopia, she still loves to work and live in Ethiopia. Similar responses were also given by others who had never entertained thoughts of leaving the country.

5.5   Altruism

Even those of the health worker respondents who wanted to leave expressed regret about it. Many of them are altruistic and care a great deal for their communities and

their country. They see the importance of using their skills to serve their country; not only as a way to pay back the government for their education, but because they want to make a difference for people and support the continued development of the medical professions in Ethiopia. Although the pull and especially push factors for many are stronger than the stay factors, for some, this altruism – often coupled with a sense of community – weighs up for most, if not all, of the reasons to leave, and consequently it becomes a strong stay factor. Among ophthalmologists in sub-Saharan Africa, Nentwich, Schaller, and Klauss (2014) found that the commitment to help one's community was the most important reason given for wanting to or considering staying in their home countries. Among nurses in South Africa, Pillay (2009) found that the study participants got much job satisfaction from patient care. However, altruism, or the idea of serving your people, is not necessarily an important stay factor for health workers elsewhere in the world, as for example Talati and Pappas (2006) found in Pakistan.

Almost all of the health workers I interviewed said that what they like the most about the job is to help improve the public health system in Ethiopia and to provide health services for the poor. This aligns with a study conducted among medical professionals at JUSH that found that among those who reported being satisfied with their job, the major reason given was that they enjoyed helping others (Yami et al. 2011). A physician said that she knows she could earn maybe ten times more if she left Jimma, but that she was not dissatisfied with her income "because I really think that I'm serving people." Another physician said that while the work environment is much better in the private sector – the material satisfaction, if you will – in the public sector you get more mental satisfaction from helping those who need it the most. When asked what he likes the most about his job, a nurse said that "everybody is in my heart. So that my community's – my patients' – concerns, worries, again their happiness – everything is within me. So I'm just feeling very privileged to be a person like this." Another nurse said that,

> […] to be a nurse for me is the – it is just a calling […] it is a pride and honour to support someone who cannot help themselves. You can see a lot of patients coming [in] with draining wounds, very foul smelling, and if you help them, at the end they hold your hand and pray for you, bless you. That is [a] blessing that you cannot buy with the money you have.

A physician stated that while he is exhausted from his high workload and spends much of his time fighting to improve the conditions in the hospital, being able to help his patients still motivates him. "I share all their happiness, their worries, whatever they are through." While for some, this outweighed all the negatives about the job, and they found this to be enough motivation to want to stay, others said that they were not happy, but providing care to those who need it the most gave them some happiness and pride in their work.

Among my respondents, especially the paediatric physicians were very altruistic. A paediatric physician said that while she is planning to leave Jimma for Addis Ababa, she does not want to leave Ethiopia. She stated that while she understands the lure of a better lifestyle abroad where the payment is higher, she does not think there is more she could contribute elsewhere than she already does in Ethiopia. She said that there are not more than 200 paediatricians serving the whole of the Ethiopian population (estimated to be around 110 million), of which a large proportion of the population falls within the paediatric age range (from newborns to 16 year olds).[7] This altruism was also present among respondents in the other health worker groups, but the sample sizes are too small to accurately say if this is a trend.

5.6   Low recognition of nursing

An additional push factor that only came up in my interviews with nurses was the low recognition given to the profession nationally, including among other health professionals and many nurses themselves. Other respondents also talked about low recognition of their accomplishments as demotivating, but among nurses it emerged not as problems of individual recognition, but of the profession as a whole. This problem leads to high turnover, as many nurses exit the profession altogether after a short time. A nurse said that the discrepancy between the attention given to physicians and to nurses "causes a psychological barrier" to learning nursing, which also means that nurses themselves value the profession lower and are more likely to abandon it altogether.

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[7] For comparison, in Norway there are 866 approved paediatricians, of which 723 are under 70 year old and considered part of the active work force, serving an ageing population of about 5.4 million (Legeforeningen 2021).

A nurse argued that many consider nursing a female profession,[8] which contributes to this problem. This image problem, he continued, exists also in the government, who does not give enough attention to the profession. Without a stable nursing profession, "they will not *ever* improve [the] health service in Ethiopia […] because [the] hospital is all about nursing." Another nurse said that without recognition and incentive to stay in the job, many nurses will not even last four months in the job. Moreover, the nursing and midwifery director and the head of the nursing and midwifery school both said that while there is enough nurse employees, they are not equally distributed across the hospital, and that there are discrepancies across the wards. Within certain medical fields, such as nephrology and oncology, there are no nurses in the hospital. There are also very few ICU nurses. He said that even if someone gets the opportunity to specialise, the payment remains very low, and consequently the turnover remains high. Training and retaining specialised nurses are therefore difficult.

5.7   Freedom of expression and fear of persecution

In their review, Dohlman et al. (2019) found that the need for personal safety and security often is mentioned as both a push and pull factor, and it especially factors into the decision to leave countries that are politically unstable or where social intolerance is rampant. This includes the lack of freedom of expression in the country of origin, or fleeing from persecution due to for example sexual preferences, or political or religious beliefs. (Dohlman et al. 2019; Sheikh et al. 2012; Akl et al. 2007). In Ethiopia, the former has been the most important factor. The emigration of Ethiopians out of Ethiopia began during the Derg period, when political persecution was rampant. Many also left because of persecution under the EPRDF regime, although this had settled down when I conducted my fieldwork. However, one of the respondents said that a family member had left in the past due to being imprisoned on political grounds.

More generally, several of the respondents mentioned the impact that political instability has on their feelings of security. While some did not think that ethnicity factored into much, one person said that "what the country has as a problem comes into everything," referring to differential treatment of people based on ethnic group

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[8] Ironically, four of the five nurses I interviewed were men, and the majority of nurses in Ethiopia have historically been men (Feysia et al. 2012). I have not been able to find updated numbers, but there are likely many more female nurses now.

membership. Another person talked about the political situation not only at the country level, but at the town level as well, mentioning specifically ethnic differences and languages and related challenges that may push people away. One respondent said that she was certain that her ethnicity factored into why she had been overlooked for promotion. She considered leaving to be able to continue her career elsewhere.

While political persecution did not continue under the EPRDF government to the same extent as under the Derg, freedom of expression has been limited. While the country begun to open up after the election of Abiy Ahmed in 2018, more journalists have again been imprisoned and there have been occasional internet and phone service shut downs and social media blocks (CPJ n.d.; Freedom House 2020). In general, it seems like the new government has continued to attempt to exert control over negative opinions. According to my sources, the government has imprisoned health workers who have criticised the how the government has handled the Covid-19 pandemic, although on other charges. During the young physician protest movement and strike in 2019, several of the respondents reported that they experienced that the government vilified the physicians who participated. A respondent said that the government responded "politically" by painting them as lazy and greedy in the media. Another respondent said that many felt so demoralised by what happened that they left Ethiopia. He had a friend "who left the country in [an] illegal way. He went through Sudan, you know. What he did was very crazy." He also said that a friend of a friend had married an old woman to get a residency in the US. "So you will do whatever it takes to go out of this country." Consequently, a respondent said that listening to the health workers instead of stifling their criticisms may lead to higher retention rates among those who feel like they have no other choice but to leave.

5.8 Conclusion

Combinations of priorities and different push, pull, and stay factors decide whether or not someone will stay or leave. The push and pull factors are often more systemic than the stay factors, which are influenced more by individualistic dispositions. As I have discussed in this chapter, the factors that push and pull people away vary, from issues of financial security, to the work environment, to professional and career development, and so on. Yet many come back to their strong feelings of wanting to help their

communities and the country and to belong in their culture and communities, and thus stay despite their discontentment with the other issues. Consequently, many have ambivalent feelings towards migration. The feelings of belonging may for some weigh just as heavy as the trauma that they experience when they cannot treat their patients due to the lack of resources or their ability to financially support their family. Furthermore, the decision to leave generally does not come easy for those who do so. Consequently, migration should be treated as a myriad of conflicting and dynamic considerations, and the discussion needs to involve examining why some people choose to stay.

When it comes to policy solutions, however, it becomes evident that the systemic issues that push people out of Ethiopia are the most pressing problems. In chapter 4, I discussed some retention policies and strategies, such as housing provision or the compulsory service period following graduation. These policies attempt to curb the push factors in Ethiopia, which are the easiest to do something about. However, while the situation may have been worse without these policies, they do not sufficiently deal with many of the issues that have been identified as the main push factors.

Chapter 6: Consequences of brain drain on the Ethiopian health system and on working conditions

I have established the significant scope of health worker brain drain, attrition, and turnover in Ethiopia, and I have shown why the problem persists. These questions have been given much attention in the literature. However, the question as to how the health workers themselves perceive and experience the problem has been understudied, especially in Ethiopia. Generally, the literature asks why people leave, but very little attention is given to how it affects those who remain. In this chapter, I begin this discussion by outlining how the respondents perceive and experience the effects of brain drain and attrition, both on themselves and on the public health system as a whole. When I asked what impact attrition and brain drain have on the hospital and the public health system and on the health workers, three main themes emerged. First, high turnover rates and attrition from the public health system increase the workload for those who remain. Second, a lack of specialised and sub-specialised health professionals, which comes as a consequence of experienced health workers leaving, means that those patients who cannot afford to travel or to go to the private health sector do not have access to all forms of treatment. The more rural, the less access there is. Third, as the more experienced professionals leave, there is a skill loss, which impedes the development of the skills of the generally younger health professionals who remain. This affects the level of care that can be given to patients and the pace of professional development.

6.1   Increased workload

Among the respondents the most common complaint about the high turnover rates was the subsequent increased workload. One physician said that when other people leave,

> The burden is on you, and you don't get paid for the extra things that you do. So it's the same payment, but the work is on you. The other thing is when they leave […] the quality of care that you give gets compromised. […] And it all goes back to, like, you can't treat the patient, [which is] frustrating.

This was echoed by several other respondents. When people leave, the responsibility to provide health care is on those who remain, while they at the same time do not get paid for the extra work they have to do. However, several people specified that while the

payment is one thing, the frustration of not being able to give the level of care the patient needs is more important.

This frustration is largely related to the effect brain drain has on the public health system. Previously, an orthopaedic surgeon had left JUSH but had not been replaced, which meant that patients had to be referred elsewhere instead. Likewise, when the cardiothoracic surgeon left, there was no replacement. This is then complicated by the poverty of the patients, who often are unable to travel elsewhere for treatment when sub-specialised services are not available locally. In another instance, the plastic surgeon had left, and the surgeries had to be undertaken by a surgeon who had not yet begun the sub-specialisation. This causes the remaining health professionals to burn out, and it impacts upon their motivation, which throughout the Ethiopian health policy documents are brought up as a major challenge to the public health system. Many of the respondents also said that the high workload affected their ability to professionally develop.

6.2 Access to treatment for patients

In general, Ethiopia struggles with an overall lack of medical specialists, which is aggravated when many congregate in Addis Ababa or other urban centres, or leave the country. The scaling-up of medical education in recent years has been concentrated on the undergraduate education, with a neglect of teaching at the specialist level. Consequently, there is an absence of several types of specialists and sub-specialists in many hospitals across the country. This is felt more acutely in less attractive areas to work in, such as Jimma, from which people are more likely to leave. Consequently, it becomes the responsibility of the remaining health workers to provide health services to the affected patients, or the patients have to be referred elsewhere. A specialist said that "most people who should be seen by specialists will not get the chance." Instead, general practitioners and residents often have to step in. Rural hospitals mainly employ general practitioners and lower-level health staff, which necessitates referral to specialised hospitals; often far away and consequently an expensive endeavour for the patients. As JUSH is the only referral hospital in the area, with a catchment population of 20-22 million, most of the patients find themselves unable to travel further than what they already have had to do to reach Jimma if they cannot be treated there due to the

costs. Many of the physicians try to find the best solution for each patient. A surgeon respondent expressed frustration with the choices he felt that he had:

> Brain drain significantly affects the service that you give to your patients and […] now I'll be faced with patients who may not be able to go to Addis. […] If a cardiothoracic surgeon or the plastic surgeon had been here, or whichever surgeon, now you can name it – urologist, neurosurgeon, and so on – if that person would have been here, then I would have had better care for [the patient].

He also expressed frustration at having to give a lower quality of service than what the surgeon with the appropriate sub-specialisation would be able to give.

Other service areas, such as radiology and anaesthesia, may also be affected by attrition and staff shortages. A specialist said that due to the low number of radiologists in the hospital, patients often have to wait months to get an ultrasound or an echo test, and that this "really compromises the quality of care that you give patients." Another specialist expressed frustration with the anaesthesia department and said that they at times do not send someone for a scheduled operation because they do not have enough people. Among nurses, the high speciality discrepancy between departments means that some departments are understaffed, and the difficulty in retaining nurses due to low salaries means that it is difficult to retain those the hospital trains. In general, the turnover among nurses remains high across all departments; in just one year, 80 nurses left their jobs in the hospital.

Several respondents stressed that the chronic understaffing due to attrition affects how much time they are able to spend on each patient. Across the different departments in the hospital, respondents reported that there is a scarcity of staff because those who have left have not been replaced. A resident said that when working in the emergency room, having an inadequate number of staff meant that he would do both the nurse's and the physician's job at the same time, which left him unable to treat every person in time; while helping one patient, another patient would die on the floor. Another resident said that she sees more than 30 patients each day, which she did not feel gave her enough time for each patient.

The attrition of health workers from the public health service to the private or NGO sector removes the pool of health workers that the public can access from the equation. One respondent said that most of the experienced health professionals who leave go to the private and NGO sectors. The result is that the rich are given greater

health services, while poor people may not have access to the health care they need. The NGO sector generally treat the poor, but it is not widely accessible and do not treat every condition.

Similarly, albeit to a smaller extent, dual practice takes human resources away from the public health sector, and it allows people with the financial means to pay for private services greater health than poor people. Several of the respondents, both among people who dual practice and who do not, said that it may impact upon the public health service. A respondent said that "when they go to the private practice and spen[d] hours there, obviously it will have an impact on the [public health] service." Possible effects that were mentioned related to absenteeism from their public sector jobs, referrals to private practice and then over-treatment – i.e. charging a patient for an x-ray of their foot when the patient complained about a stomach ache, as one respondent gave an example of – or increasing public waiting times to force patients to visit a private clinic. This has also been found in other studies (Abera, Alemayehu, and Henry 2017; Socha and Bech 2011; McPake et al. 2016). A few respondents had experienced this happening when they had worked elsewhere in the country. Most mentioned only absenteeism as a possible consequence, however. A resident said that dual practicing may make people tired and less punctual for their students. A specialist said that those who do not dual practice may be burdened by those who do, as they often are away from the hospital. She would herself often spend her off hours in the hospital without extra pay to ensure every patient was seen. Dual practice is interesting because it has many of the same consequences as brain drain and attrition, but it directly and indirectly affects the same practitioners who engage in the activity. The CED of the hospital, himself a physician, said that

> as a manager you see and hear lots of complaints from patients. You'll be in a difficult position. Because you need to address the legitimate questions and rights of patients and students. So, finding equilibrium where you can strike a good balance between this – the demands and the rights of patients, students, and staff – is usually very difficult.

Without the option to dual practice, many health workers, especially physicians, may be more likely to leave their job. Consequently, the ability of health workers to work in the private health sector may mean they are retained, yet it may affect the workload for others and the level of care for the patients.

6.3   Skill loss/knowledge gap

When people of all levels of experience leave, the development of the public health sector is affected. When junior professionals leave, the potential for further development is lost; when senior professionals leave, they take their knowledge and experience with them, which they no longer can impart on their junior counterparts. A nurse said that within his department, there were only four or five seniors; the rest had gone to Addis Ababa. He said that when an experienced person leaves, those who remain lose the wisdom of that person. A physician said that in being unable to retain health professionals, the public health service is failing the public. A resident contended that when physicians in general leave, Ethiopia loses some of its most brilliant citizens, as studying medicine requires the highest grades in the country. A study in Colombia has previously shown that physicians who emigrate tend to be higher academic achievers (Rosselli, Otero, and Maza 2001), which one respondent also suggested may be the case in Ethiopia. No study has been conducted on this topic in the country, however.

Furthermore, when the more senior health professionals leave, the medical education offered to undergraduate medical students and residents may be significantly affected. A specialist said that it is crucial for the residents and medical students to have a stable teacher. Because he had to spend so much time working due to the attrition of other physicians, he was not able to spend the time keeping both himself and his students updated, which affected the training of the more junior staff. This sentiment was repeated by several of the residents, who uttered concern over the impact on the quality of education when more experienced staff leave. A resident said that he felt like he was not able to become "professional enough" because there were not enough seniors or teaching assistants to teach them. None of the respondents mentioned problems with the quality of teaching at Jimma, and their concern was rather with the loss of skills from the institution and how that affected the overall teaching and learning activities. In general, the skill loss from the attrition of senior staff was a concern among many of the respondents. A nurse said that if there are no experienced people left, "it is killing the profession, it is killing the knowledge, it is killing the skills." Without skilled personnel, she asked, who is left to learn from? Similar responses were also given by specialists, who also pointed out the importance of being able to exchange ideas with others.

Some respondents warned that this, combined with the increased workload of the health professionals, leads to system failure. When all the health professionals leave and take with them their knowledge, the public health system suffers. A physician argued that the health system goes stagnant without its most experienced staff as the necessary development of the medical field is impeded. A nurse said that the health system in Ethiopia has failed, despite what the Ministry of Health is saying:

> Yes there is an expansion in health centres, hospitals, health posts. Yes there is an increase in the number of workers – particularly the health extension worker, which the government consider themselves as a pioneer. In fact, it never worked, from my point of view. […]. But the quality is poor.

This, he said, is because of the absence of experienced professionals to teach the newly educated health workers. For example, he said that when newly graduated nurses and other health staff go to a health station, there is often an absence of an experienced person. This means that when they start working, there is no one to correct inefficient or damaging practices, which is detrimental to the health system. Similarly, a physician said that because the public health system "keeps losing very brilliant people, […] the public health service in Ethiopia is failing people." While training new health professionals is an expensive endeavour, most agreed that the government needs to prioritise the retention of those with experience, without which the rest of the system is weakened.

Consequently, it may be efficient to target senior medical staff with retention strategies to a greater degree. There has been some success in retaining surgical graduates in Ethiopia, which Derbew, Laytin, and Dicker (2016) found relates to the high number of surgeons who have remained in the Ethiopian public sector and in this way serve as role models. A specialist in his early 30s said he was the oldest person in the hospital within his specialisation, and argued that when the medical students and junior staff see their seniors and tutors leave, they ask themselves if there is a place for them here, and if anyone will take care of them if they stay. Another specialist criticised the hospital and the University for neglecting to take good care of the senior staff who had worked there for a long time, despite the sacrifices they make in staying. One resident noted that some of her teachers from her undergraduate medical education had left Ethiopia, even though they had to redo their residencies in their destination countries. "That gives you no hope to practice here. After acquiring all this training, all

this skill, if they leave and restart something abroad, you will be discouraged." Another resident said that "when somebody whom you make a role model leaves the country, you're gonna think: why am I staying here, when my role model is leaving the country?" Yet another resident said that seeing his highly skilled seniors leave the country and end up as taxi drivers or in other low-skill jobs affected his motivation and that "it shows how bad [it is to] work here." While personally no longer wanting to leave, a specialist in his mid-30s said that he previously had been influenced by others. "When people leave for better jobs and better positions, it affects you psychologically. You also think of doing the same."

Similar to senior staff leaving, a related threat to the system is when visionaries leave. In many cases, their initiatives have not been institutionalised, which means that when they leave, "their vision is also leaving. Their strategies are also leaving." A respondent who had changed positions within the hospital said that when he previously held a different leadership position, he had created a plan to improve the response to health crises. However, after he left, he asked the people who worked there if they had heard about it, but they had not, despite the document he left behind with the plans. Another respondent also said that after he had left his leadership position, the new person who came in changed some of what he had done, and many of the things he had worked towards improving had not been followed up on. This illustrates that the system is highly dependent on individual visionaries. It also shows a weakness in the management system, which needs to be addressed; changes need to be institutionalised in the system and not depend on individuals. As the system currently stands, it is more vulnerable to brain drain and turnover than necessary. One of the respondents that there is a need for people who know what needs to be accomplished and how to do it, and these people need to be actively targeted with retention strategies. A nurse made a similar point: "when you leave your position, you could have handed over your work, your experience, your plan to the incoming person. But this is not the case. So when I come as a new person, I start from scratch." Consequently, when people leave, there is a consistent skill and knowledge loss that is not transferred to those who come to take their place, which at the leadership level impedes the potential for lasting development.

6.4   Conclusion

The experiences of the health workers with brain drain and attrition from the public health service shows that the problem has consequences both from themselves and for the (public) health system. In this chapter, I discussed the main themes that emerged from the interviews, which are interrelated with each other. The increased workload that follows from the high number of people leaving their jobs, affects both the ability of the remaining health workers to provide quality care to all the patients and the time they have available to teach their juniors. This again hampers professional development and the development of the medical profession as a whole. Likewise, the knowledge gap that follows from senior health staff leaving also causes higher workloads for those who remain, as they have to treat patients that they are not specifically trained for. The patients may then experience a lower level of care than if they had been treated by the correct specialist, or they are forced to travel elsewhere, which many cannot afford. In sum, brain drain and attrition reduces the transfer of knowledge between health professionals, leads to health worker burnout from high workloads, and may lead to lower quality of care for the patients.

Chapter 7: Health worker perceptions of policy and strategy

In this chapter, I will focus on the Ethiopian health workers' perceptions of and experiences with the retention policies and strategies that I outlined in chapter 4. First, I discuss their views on the hospital's retention strategies. Then, I examine their perceptions of the national retention policies, with specific reference to the compulsory service period and the increased medical education intake. I also briefly deal with points raised on improving working condition and on political context. As one respondent said, he wants the government and other relevant actors to listen to the health workers' wants and needs when they develop these policies and strategies. Because, as another respondent said, "at the end of the day, you have dissatisfied health professionals," and if this problem is not solved, people will continue to leave. Many of the respondents therefore argued that policy change is necessary.

7.1 Health worker views on hospital retention strategies

As I have discussed, the retention of health workers in Jimma seems to be somewhat more difficult than elsewhere in the country. Yet, despite the decentralisation of health services that gives greater responsibility to local actors, there is a limit to how much the hospital is able to do. Many of the respondents recognised this, and overall, most of the them were positive to the hospital's retention strategies, although several believe they can do more.

The non-monetary forms of compensation were commented on by a large number of the respondents. Several specialists commented that they were content with the housing the university was providing. One respondent said that the low salaries were not felt as badly in Jimma as other places because of the free housing. For her, moving to Addis Ababa was not an option because it would require that she dual practice to survive. The provision of housing in Jimma meant that she could concentrate on other things. Because of the close proximity to the hospital, she also commented on not having to pay for transportation, and another respondent said that water, electricity, and Wi-Fi also are included. "You just need to pay for your meal only." The gated community right behind the hospital also provides security to its residents. Many respondents argued that the housing provision should be extended to other medical professional groups as well, or they should at very least be offered transportation. Yami

et al. (2011) have previously found that job dissatisfaction among health workers at JUSH was influenced by not having access to incentives such as housing. However, as was mentioned above, the housing is limited. A respondent said that some physicians may decline a job offer from Jimma unless they are provided housing. Another respondent suggested that if it is not possible for the hospital to provide free housing for all of their staff, the hospital should instead provide low-rent housing to lessen their financial burden. These sorts of provisions may compensate for the "locational disadvantage of being 300 kilometres [away from Addis Ababa]."

Other types of compensation were also brought up. Some respondents suggested that the hospital could provide its health workers with medical insurance to increase their likelihood of staying in the country, which would reduce the push factor in the threat of disease transmission. A lack of free health care was in Yami et al.'s (2011) study found to impact negatively upon the job satisfaction of health workers at JUSH. In the physician protests and strike of 2019, this was on the national agenda (Mekonnen 2020), and would perhaps be better provided through government policy and funding than as a local hospital strategy.

Some respondents brought up capacity building and further education opportunities for the health workers as a retention mechanism, which wold create a stay factor. This involves both access to higher levels of education, such as master's degrees for for example nurses or sponsoring PhDs and sub-specialisations for physicians, either locally or abroad, and short training opportunities to stay updated in their field or learn new skills. In a study in Tigray, Gebregziabher et al. (2020) found that nurses who were dissatisfied with the training opportunities in their organization were more likely to want to find work elsewhere. Other studies, both in Ethiopia and elsewhere, have come to similar conclusions (Asegid, Belachew, and Yimam 2014; Getie, Betre, and Hareri 2015; Halter et al. 2017). One respondent said that continued learning – whether it be from training or from scientific forums – lead to visionaries. These visionaries may in turn teach other people, which helps the positive development of the health system. Both the continued development of the health system and the improvement of local working conditions depends on the retention of visionaries and their "visions."

The same people who stressed education as a retention mechanism also argued that the hospital should institute recognition mechanisms. One respondent said that "if I appreciate one senior staff for his good work and acknowledge him in front of people

and give him an award, another staff may [be inspired]." This aligns with the findings of Bryant-Hampton et al. (2010) that show that recognition of long-term nurse employees decreases their likelihood of leaving. Such recognition may not only lead to the retention of the person, but it may also inspire them to participate in further training opportunities, and in that way also work as a capacity building mechanism. Recognition mechanisms may also inspire people to work harder. One complaint that was brought up several times was that several nurses are not working to the best of their ability. This is likely partly due to the low recognition given to the nursing profession as a whole in Ethiopia, in combination with their very low salaries. A higher recognition of the nursing profession as a whole may consequently lead to higher retention rates for this professional group.

While some respondents argued that recognition is more important for retention than monetary compensation, salaries are undoubtedly an important element to retention, as shown by the willingness of health workers to dual practice despite the many downsides, and by the findings of Astor et al. (2005) that show that 83.5% of the study participants[9] believed increasing physician income would reduce physician emigration. The respondents to my study who argued that recognition weighs higher than salaries reasoned that salaries are the same all over the country. However, the hospital decides on duty payments based on their budgets. One respondent suggested that clinical staff who also have to teach should get an additional payment. A physician argued that nurses should be given higher duty pay to motivate them both to stay in their jobs and to work hard during their shifts. Both the physician and a nurse respondent argued that if all the nurses worked at their capacity, it would alleviate the stress on the physicians and other nurses who feel like they have to do far more work than necessary. A resident said "I made every activity both as a nurse and as a doctor. Because the nurses are not working. Why they're not working? They may complain that they are not paid properly." Residents also complained about not being paid properly for their duty shifts as they do not receive full compensation. Some residents consequently said that they should be compensated fairly for their time on duty. Moreover, among the physicians, there were several complaints of often late duty payments, and some said that the lack of stability is stressful. One specialist said that "the normal salary is not enough to raise their kids, so [the late payments is] a serious

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[9] Physicians from Colombia, Nigeria, India, Pakistan, and the Philippines.

thing." She continued by saying that the budget allocated by the university leadership for duty payments is usually not enough.

Some respondents argued that the hospital could upgrade the facilities. While I was visiting the university, a new large building was being constructed. This building will, among other things, house the university administration. One specialist said that "I don't know why they're expending this much billions of birr or dollars on the building, [when] still the patients are dying in here." Another specialist argued that because JUSH is a teaching hospital, it is important that the facilities are as good as they can be.

However, despite the decentralisation responsibilities, authority, power, and resources within the health system, decisions are made centrally and at higher levels, which combined with low hospital budgets, means that there is a limit to what the hospital and university can do to retain its health staff. A resident said that "I think the hospital can do nothing. […] Everything will be governed by the central government, and it will be monitored. [The hospital] can do nothing on their own." Similarly, a specialist said that "it's not something that you can solve at the hospital level. It requires, you know, involving all stakeholders, including the Ministry of Health and appropriate people from the government." A specialist pointed out that "this question is bigger than Jimma." This shows that despite the decentralisation policies that give greater authority and responsibility to the local levels, they are only the implementers of policy and there are limits to what they can do on their own.

7.2   Health worker perceptions of national retention policies

When it comes to implementing national policies, the hospital's HR director said that policies that are meant to stop brain drain are difficult to implement. In comparison, he did not experience difficulty in implementing other human resource policies, such as those related to leadership or to the transfer of employees. He said that it is very difficult to implement the retention policies because they, among other things, involve highly educated and resourceful people whose needs and demands are difficult to satisfy. Because of the difficulties surrounding retention policies, one respondent had a cynical outlook on the national retention policies; he found the strategies to tackle attrition and brain drain to be so negligible that "it's better to say there is none."

7.2.1 The compulsory service period

There was a difference between those that were positive to retention policies such as the compulsory service period that force people to stay in the country, at least for a while, and those who were against such policies. Especially the latter group believe that the ultimate goal of retention policies should be to remove the push factors in Ethiopia. One resident said that "if [the government] don't want any skilled worker to leave the country, [they] don't have to impose the rule on him. He should be here in the country based on his *will*." Consequently, he was discontented with the government contacting the American embassy to request them to cease issuing visas to Ethiopian physicians. I have not been able to verify this, however. He pressed that he love his job and want to serve his country as a physician, however, he would go abroad immediately if he could because he was demotivated by the entire system. He had tried to leave Ethiopia since he was in high school.

Many of those who were positive to the compulsory service period also agreed that the government needs to reduce the push factors in Ethiopia. However, several of these respondents contended that this would not be a realistic outcome in the near future, and instead found that the service period was an acceptable alternative. A nurse said that "if you work for the government, you will develop your experience. [The service period] is not for many years […] so that doesn't [do] much harm." A specialist disagreed with the government's decision to reduce the alternative payment drastically. He believed, like Kollar and Buyx (2013), Brassington (2012), and others in the discussion I summarised in chapter 1, that because the government sponsored their education, health workers "should contribute to *some years,* I think. […] You cannot just *learn and go.* It's like an insult." The recent reduction in the alternative payment to the compulsory service was also one of the reasons why the HR director found that it was difficult to implement retention policies. He called it "a gap" – a loophole – in the policy, allowing people to more easily get out of the compulsory service period, and consequently make it more difficult to retain health workers.

Some studies on compulsory service periods where the health workers have to work in rural areas to gain their license or in another way finish their degrees have found that many do not continue to work in these areas (Frehywot et al. 2010), which is also the case in Ethiopia. Another study has found that physicians do not think compulsory service periods will cause a reduction in brain drain rates in the long run

(Astor et al. 2005), which was echoed by some of my respondents who said that it only postpones emigration. One respondent questioned the effectiveness of the compulsory service period. He said that while people are forced to stay for that period, many leave once they are able to. "I know a lot of my friends and also my senior doctors, they are living in America. They have left."

7.2.2   Increased medical education intake

Many of the respondents were critical of the rapid pace of the increased medical education that is meant to increase the HRH in Ethiopia, although few commented specifically on either the flooding policy, which involves increasing the numbers of spaces for students in the existing medical schools, or on the establishment of the new medical schools themselves. One general complaint was of the quality. One of the respondents – a resident – had attended one of the new medical schools. She said that the educational institution she joined was not prepared to train medical doctors. She also did not work as a general practitioner in between her undergraduate degree and the residency as she instead was recruited as a lecturer, so when she came to Jimma as a resident, she felt unprepared to work in a clinical setting. She said that there was a lack of teaching human resources when she was an undergraduate student; as lot of her education was provided by general practitioners, more senior medical students, and sometimes the nurses, because the senior physicians were leaving the school and hospital where she studied. A specialist said that "it's correct to open more schools and increase the number, but the pace is not correct." He pointed out that the necessary resources to teach – whether they be human or non-human – has to be developed alongside the scaling up of the education. It is mainly the undergraduate education that has been scaled up, whereas the amount of teaching at specialist level has remained low. This consequently means that there is a lack of teachers, and undergraduate students like the resident above end up being taught by people who have a lower level of education. There is also a lack of diversity in the medical education workforce. Assefa et al. (2017b) thus argue that instead of first expanding medical education, it is necessary to initially ensure a sufficient medical education workforce with enough specialists within all medical fields. However, the specialist said that the government now has started to increase postgraduate education as well, but it is slow.

The lack of investment in postgraduate training was brought up by another respondent. To deal with the shift in the epidemiology of disease towards non-communicable disease, he said that Ethiopia is

> investing hugely, heavily on infrastructure, but we did not invest on human resource development in parallel. So, whatever amount you spend on infrastructure, especially when it comes to medical practice, it is the people, or the professionals, that are going to provide that care.

He did not specify what kind of infrastructure and equipment, however. The new equipment and infrastructure will be useless without health workers to operate them, "so if you don't have the right individual with the right or the proper skill and knowledge, what is the purpose?" However, other respondents complained of a lack of such infrastructure. While there may be some investment, it is likely still overall low compared to the need. On the same point, another respondent said that the government needs to ensure learning arenas, such as scientific forums or alternatively public-private partnerships to improve health worker competencies. In the absence of specialisation and sub-specialisation opportunities, having learning arenas can at least help circulate the knowledge of those who have been able to specialise.

While the increased medical school intake is meant to solve the need for health workers and to reach an acceptable health worker density, another problem is a disconnect between the supply of health workers and the number of jobs the government can afford within their budget. This is a problem many places in the world (WHO 2016a; WEMOS 2018; Herbst et al. 2016). A respondent said that "we are in a stage where doctors are not being employed. Because the number of doctors being produced is increasing *very* fast." Because the increased intake mainly has happened at the undergraduate level and because the government no longer assigns recent graduates to jobs, many physicians find themselves unable to find jobs as general practitioners, which is required to receive their medical degree. Regional and zonal health bureaus are complaining of lack of budgets to hire new physician graduates (Mekonnen 2020). Because of the slow increase in postgraduate training, many may therefore struggle to keep going, and more people may try to go abroad as they find there are no opportunities for them in Ethiopia.

7.2.3   Working conditions

When asked what the government can do to improve the retention of health workers, many of the respondents argued that they need to improve the working conditions, including the salaries, which I showed in chapter 5 are drivers of emigration. In a study on the views of health professionals from five countries on medical brain drain, Astor et al. (2005) found that the study participants thought that increasing income and improving working conditions were the best way to upgrade policies to ensure the retention of health workers. All the themes that emerged are directly related to the push, and somewhat the pull, factors that I discussed in chapter 5, such as the need for more clear career development, a reduction in workload, improvement in infrastructure and the procurement process, increased salaries and non-monetary forms of compensation, and, barring all these things, some respondents argued that the government should help facilitate more private sector development where the sector is small to give all access to dual practice opportunities. Among physicians who dual practiced Tigray, most of the specialist physicians who participated in the study said that they would leave their job in the public sector if their ability to dual practice disappeared (Abera, Alemayehu, and Henry 2017). Among my respondents, several of the non-physician respondents also said that the government should target other health worker groups than physicians to a much greater degree. However, these issues are difficult to deal with due to the financial situation in Ethiopia, and are not directly addressed through policy.

7.3   Conclusion

What emerged from my interviews with Ethiopian health workers is that there is a need for a more comprehensive HRH policy that also touches on issues that are not directly related to the number of HRH in Ethiopia. Overall, the respondents were positive to the hospital retention strategies, and most stressed that they know there is a limit to what the hospital can do based on funding. However, many of the respondents, including physicians, commented that they thought these strategies should target other health worker groups than physicians as well. Some of the suggestions, such as the provision of medical insurance to the health workers or facility upgrades would likely depend more on national policies of economic distribution.

Many of the respondents were more critical of the national retention policies. Some thought the compulsory service period is an important step to keeping a steady

supply of physicians, whereas others disagreed with policies that take away their agency. Instead, they argued, the government need to remove the push factors. Furthermore, while the compulsory service period ensures a steady supply of health workers to underserved areas, it does not lead to permanent retention, and is thus not a sustainable strategy for retaining health workers. When it comes to the scaling up of the medical education, many thought that the policy will be less effective if the underlying problems related to work environment are not addressed. Furthermore, as the medical education workforce is insufficient, some questioned the quality of the education. This indicates a need to scale up the education at the specialist level simultaneous to the education at the undergraduate level. Moreover, it becomes evident that retention does not rely purely on policies that target this specifically. Therefore, a more holistic approach needs to be taken, which involves a comprehensive HRH policy. To reach global health goals of health worker density, health worker recruitment and retention need to go hand in hand, and it is clear that more funding on both national and local levels is necessary to fulfil the health workers expectations for policy improvement.

Chapter 8: Conclusion

In this thesis, I have discussed health worker perceptions of and experiences with brain drain and attrition from the public health service, and the related policies within the Ethiopian health system. I have shown the magnitude of the problem, and how these issues affect the health workers that remain in Ethiopia or in their place of work. To contextualise this problem, I have also demonstrated that historical and political context have shaped the form of the Ethiopian health system, including HRH and retention policies. Ethiopia struggles not only with external brain drain, or health worker emigration, but also with internal migration towards urban centres and attrition from the public to the private sector. Because of the impact that migration from peripheral health institutions has on those that remain, I have in this thesis not only dealt with brain drain but also with internal migration from peripheral places to urban centres. Many of the outcomes of brain drain also come from internal migration, such as increased workload or difficulty of accessing treatment for patients. As Jimma seemingly is one such place that people are more likely to emigrate from, this is especially relevant to this thesis.

While brain drain has received much attention internationally, and much research has been done on how it affects health systems in sending countries, there has been little research on how health worker emigration affects the health workers themselves in these countries. Through qualitative interviews, observation, and document analysis, I have placed health workers' perceptions and experiences within the Ethiopian context in general and in Jimma and JUSH in particular. I have shown that the health workers that remain are adversely influenced by the migration of others.

8.1   Health worker perceptions and experiences

Brain drain affects the health workers in many different ways. Some effects more directly influence the health workers, such as increased workload due to fewer health workers or less opportunities for professional development as the more experienced people leave and take with them their knowledge. Other effects are more indirect as they first influence the health system, which in turn negatively affect the health workers themselves. This includes for example the loss of skills when people leave, which again leads to higher workloads for those who remain, and more difficulty for patients to access the treatments they need and the loss of skills, which may affect the health

workers' morale and motivation. That many leave, especially more senior health workers, may also influence those who remain to follow; either because they hear about better conditions abroad or elsewhere in Ethiopia, or because they do not see a future in a health system that does not take care of the experienced health workers.

Other push and pull factors also influence their motivation, and many respondents found especially the push factors demotivating. The main problems come down to issues of resource scarcity and work environment, which many find exhausting, and to issues of professional development, which makes people look abroad or to bigger urban centres where there are private or NGO sector opportunities. In many cases, it seems that the altruism of Ethiopian health workers may be somewhat of a saving grace. For many respondents, helping the poor was the principal factor for their job satisfaction, and their main motivation for staying in Jimma or in Ethiopia. But seeing patients die because treatment resources were not available, or seeing them drop out of their treatment because of high expenses, were for many of the respondents demotivating.

Consequently, when it comes to HRH and retention policies, focusing on the scaling up the education of health workers is not enough; training more health staff does not touch the root of the problem that leads to a demotivated health workforce. Instead, many of those who can leave, leave to seek higher salaries and better working conditions elsewhere – either within the country or outside of it. Moreover, the focus on increased health worker output may, as a respondent pointed out, happen to the detriment of quality in the education, and ultimately contribute to system failure.

8.2 Health policy development

If political will had been the most important factor in the relative success Ethiopia has had under the rule of the EPRDF in developing its community health programme, they also would have been able to improve other problems in the health system. Yet, despite concerns over the problem of HRH, many issues remain unsolved, and health workers continue to be so unhappy with their jobs to the extent that they leave – either their jobs or the country.

Since the mid-2000s, with the advent of the HEP, HRH has been a part of Ethiopian health policy. The number of health workers has increased drastically since

the Derg regime, and so has the number of health institutions at all levels of the health system. It makes sense that much of the HRH focus was on increasing the numbers of the community health workers, the HEWs, as Ethiopia scored low on health indicators across the board. The HEWs, as a level of health worker, were designed to only make sense in the rural primary health context, and were chosen from the communities they were meant to serve to increase the likelihood of utilisation of their services.

Within this health context, it is rational that the government next prioritised mid-level health workers over physicians, since these health workers are cheaper both to train and to employ. Furthermore, the Ethiopian health cadre of health officer have a skill mix that is specific to the Ethiopian context, and their international marketability is therefore much lower than that of physicians and nurses. However, the scaling up of and task shifting to mid-level health workers to improve the access of health services in rural areas has been done without at the same time also improving the working conditions and motivation of these health workers. Many nurses, for example, do not feel like their job is valued – neither normatively or financially – which indicate that the Ethiopian HRH policies are created as a sort of magic bullet approach, and that much of them fall within the biomedical approach that political economy analyses of health critique.

The same problem can be found in the way the education of physicians has been scaled up. Now that the health of the population has increased to the point of an epidemiological shift – the population is growing older and non-communicable diseases are on the rise – there needs to be an increased focus on ensuring a supply of physicians, and on ensuring that they stay in Ethiopia and are equally distributed across the country. The scaling up of the education on this level is necessary, but it also needs to extend to the postgraduate level to ensure enough specialists to meet the new health demands. However, the focus on the scaling-up of the education has not dealt with the root of the problem, and the motivation and consequently retention of physicians have not been addressed adequately in policy. To meet the health needs nested within this shift in epidemiology, tackling health promotion and prevention is also necessary, however. Here, the strong primary health care system in Ethiopia is likely a strength.

8.3   The political economy of HRH

When Fieno et al. (2016, 8) argue that "Ethiopia provides an example of a country that is successfully navigating its way past the very same political economy challenges facing other African HRH crisis countries," they are correct to a degree. As I have shown, the strong state capacity shown in the government's ability to mobilise aid funding has been crucial to their ability to fund the HEP. However, when Fieno et al. argue that there is no way of knowing if the increased health outcomes and the HRH successes in Ethiopia also would have come out of a democratic rule, they demonstrate a lack of understanding of the development of health services and HRH in the country. The specific health system development in Ethiopia has come about *precisely* because of the political rule of the country. Looking back to both the TPLF during the insurgency against the Derg and at the developmentalist ideology of the EPRDF in government, welfare services were developed because their support and legitimacy have depended on development.

The strong state capacity and consequent ability to channel aid funds is a result of the amalgamation of the party and the state. The strong state capacity was a result of the federal state structure and decentralisation of service delivery, which meant that there were people loyal to the government at every level. Consequently, when Fieno et al. (2016) and many others attribute (some of) the successes to political will, they only paint half of the picture. It is easy for a government to have political will when they control every level of the government. Simultaneously, political will becomes too simplistic of an explanation when we try to understand why other problems remain. We might as well say that problems of unequal geographical distribution and brain drain remain because there is no political will to solve these issues.

Instead, the limited financial capacity of Ethiopia has severely limited what they are able to do. Despite, the remarkable ability of the government to control the flow of aid, the country still has few financial resources and are highly dependent on aid. The prioritisation of the HEP and the HEWs naturally means that other things fall behind, and this means that continuing to develop the health sector outside of the priority areas will be limited, no matter the political will to improve things. Furthermore, unless there is a comprehensive HRH policy that looks beyond the health field for solutions to the retention problem, it will be difficult to retain health workers, especially in the peripheries. As much of the country remains infrastructurally underdeveloped with little

access to private sector work to bolster their (relatively, for some) meagre income, many health workers seek to find better work where there are more opportunities. Furthermore, as health workers continue to experience trauma over losing patients from preventable causes due to the lack of the necessary resources, many seek to escape this. Consequently, as the demand for health workers rises in the private sector in urban centres and in (especially rich) foreign countries where these working conditions are better, health worker brain drain and attrition from the public health sector will continue. Unless the political will to stop brain drain physically restricts people from leaving, like the compulsory service period does for a number of years, health workers will continue to be affected by the different push and pull factors that drive them away.

8.4 Future research for more effective policy

To create a comprehensive policy for retention and motivation, all factors that lead to low motivation and retention among health workers need to be identified and dealt with. This thesis has started to fill the gap by identifying several factors that affect health worker retention and motivation. However, several further areas of research arose from my field work. First, a systematic in-depth analysis of the effectiveness of the retention policies and interventions – including more general HRH policies that has an impact on the retention and number of health workers – may provide much-needed insight for policy making. There have been some assessments on HRH policies, but more attention needs to be paid to the health workers' perceptions and experiences to better evaluate how the policies affect those they are targeting. For example, Ethiopia is a prime candidate to conduct empirical research on the effectiveness of compulsory service periods for the retention of health workers. While it is a common solution proposed in the literature, as I discussed in chapter 1, the evidence from Ethiopia indicates that it does not lead to retention in the long run. However, now that the alternative payment has been drastically reduced, will this lead to an increasing number of young recent graduates leaving the country, or will the proportion of people who leave remain the same?

To make a policy that includes all aspects, a systematic country-wide study that looks at all levels of the health system that struggles with these issues should be undertaken. Most research on retention and turnover among health workers in Ethiopia

has used different indices, which means that the results are less comparable. A study that compares all referral hospitals in Ethiopia would perhaps reveal whether or not and to what extent Jimma and other similar places differ. Are health workers, and especially physicians, really more likely to leave from here compared to other similar places? Is the observation of one of the respondents that senior physicians from Jimma are more likely to go abroad than senior physicians from elsewhere correct? In this way, the places that struggle more with retention may be targeted more specifically. Furthermore, only a few studies have backed up the quantitative data with qualitative interviews. Instead, the existing studies often reduce the problems down to easily quantifiable variables which do not significantly delve into the connections between them or the real effect they have on the health workforce. Qualitative research is necessary to identify all the possible indicators that need to be measured. This also includes identifying the stay factors. I have identified some, but more targeted research may find more, and find ways to capitalise on these to improve retention. Without the perspectives of those affected by policies, it may be difficult to increase the motivation of the health workers who remain, which will improve their work performance and retention. Understanding how the system impacts upon people's experiences may give insight into new possible policy interventions to better working conditions and consequently improve motivation and retention.

On the social level, it may be useful to do identify whether aspects such as ethnicity or religion factor into the decision to leave or to stay. Has the many ethnic, and to an extent religious, conflicts within Ethiopia had some impact upon health workers' migration decisions – both internally and externally? Furthermore, more research should be done on the gendered aspect of migration. Has the gendered aspect of health worker distribution and emigration changed as the number of female health workers have increased compared to just 10 years ago? Overall, the impact of such social aspects on health workers' relationship to their jobs is understudied, despite being important elements in the Ethiopian social and societal context.

As I have shown in this thesis, political context matter to health service development. The recent change in government has so far not been considered when researching the health system in Ethiopia. Consequently, it is worth asking what the impact of the new government of Abiy Ahmed and the Prosperity Party has been on the motivation and retention of health workers. Has the 2019 protest movement and strike

and the subsequent government response caused more people to leave, including through "illegal" means? Or will the new government be able to stem the emigration of health workers and improve the retention in peripheral areas? What is clear, however, is that if nothing is done, an unsustainable number of health workers will continue to leave Ethiopia. Will the new government enact the necessary changes, or will they fall back on old habits?

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Appendix A: Interview guides

I.   Interview guide for medical professionals

Background questions
Respondents were instructed that they did not need to give in-depth answers to these questions, but to feel free to elaborate.

Age?
What is your job title?
- How long have you had this job?

How long have you worked in the health service?
- Have you previously held other jobs in the health service?
  - If yes: What kind of job(s) and for how long?

What kind of education do you have?
Where did you get your education?
How long was your education?
Did you feel that your education left you adequately prepared to start working?

Can you (shortly) summarise what your job entails? What do you do in a day?

Job satisfaction
What do you like the most about your job?
Is there anything you don't like about your job?
What is the biggest challenge you face in your job?
- Do you think this would be different in the private/NGO-sector or abroad?

Can you talk a bit about what it is like working in the public health sector?
- And in this hospital, specifically?

(Do you think other health workers share your opinion?)

How long are your shifts, generally / how long is your workday?
Are you happy with your pay? Why/why not?

Overall, do you find your job motivating? / Despite all the challenges, do you find your job motivating?

Do you work with patients?
- If no:
  - Are there enough medicines, supplies, etc.?
  - Is there enough staff employed?
- If yes:
  - Do you have access to all the resources you need to treat your patients?
  - Do you feel that you have enough time for all your patients?
  - Do you often have to improvise/be creative in order to treat your patients?
To what degree do you think this is better or worse in the private or NGO sector in Ethiopia?

Do you feel that you can develop yourself professionally do the degree you want in this job?
- In this hospital?
- In the (Ethiopian) public sector?
- In Ethiopia?

Plans to leave
Where do you see yourself in the future (1 year, 5 years, 10 years)?
- Do you intend to stay in your job? / Do you intend to stay in the public health sector in Ethiopia?
   o If yes: what is the reason for continuing to work here/in the public health system?
      ▪ Do you have plans to leave in the future?
   o If no: Why? (e.g. pay, work environment, motivation, incentives, etc.?)
      ▪ Where do you want to work instead? (e.g. private, NGO, abroad, non-medical)
What are your future career plans and aspirations? E.g.:
- Further education? (PhD, specialisation, sub-specialisation)
- Policymaking/ministry of health
- Etc.

What were your plans/where did you want to end up when you were in school/studying?

Other employment options
How many of your colleagues have left (in the past year, 5 years, 10 years)?
- Do you know to go where?
- Do you know why?
- Approximately how many?
How many of the people from your bachelor/undergraduate/medical school class have left:
- The country?
- The public health sector?

Do you or anyone you know dual practice in both the public and the private sector?
- Is it common?
- Why do you do it? / Why do you think other people do it?

Effects of brain drain
Are there high turnover rates?

How (if at all) do you think your colleagues leaving this hospital to work elsewhere (private/NGO sector, abroad, etc.) have affected your experience of working here?
More generally:
- How do you think it affects this hospital?
- How do you think it affects the Ethiopian public health system overall?
In your experience, is it often experienced staff or new staff that tends to emigrate abroad?

Do you think there is enough medical staff employed here?
- Especially doctors/physicians and nurses? (Different types of specialists?)
- If no: How do understaffing affect your experience of working in the public health service?
    o Motivation/job satisfaction?
    o Ability?

Does attrition affect your ability/motivation? Elaborate.
Have other people leaving affected your desire to also leave?

History
Some of these questions often came up naturally in conversation. These questions were only discussed with respondents who had worked in the health service for a long time, generally a minimum of 5-6 years. However, many struggled to answer these, and I often opted to leave them out.

Have you noticed any changes in the number of people leaving to work elsewhere?
Has there been a change in where people go to work? (private, NGO, abroad, non-medical work)

Have you changed your view on whether or not to leave during your years working as a health professional?
Why have you worked in the public health service for so long?

Have you noticed any changes in who goes abroad / to the private/NGO sector (trends)?
- E.g. senior personnel physicians, junior personnel, length of tenure, age, marital status, etc.

Any other trends?

Responses to brain drain
These questions were only asked to respondents in administrative positions. The interview with the HR director expanded more on these.

Why do you think there is such high attrition/turnover rates?
Is the hospital doing something to stop attrition?
- If yes: what?

Are there national health policies or strategies that deal with attrition and brain drain?
- If yes: what are these? Are they mandatory to implement?

Additional questions
These questions were added after they came up in conversations/interviews, and all the respondents have therefore not been asked these.

Do you think you face any social barriers (e.g. gender, ethnicity, religion) in your job in any way? Have you reflected on this?

In your opinion, is there anything you think *the hospital* could do to reduce attrition and brain drain?

Do you have anything you want to add that you think I should know that I haven't asked about?

II.   Interview guide for the HR director

Background
Age?
What is your job title?
-    How long have you had your current job?
How did you come to work in public health?
Have you previously had another job in either the health service, in policymaking, or something related?
-    Have you ever worked as a health professional?
    o   If yes: what kind of job(s), and for how long?

What kind of education do you have?
Where did you get your education?
Is your current role related to your education? / Do you feel that your education is relevant for what you currently do?

HR department and role of HR
How many people work in the HR department in this hospital?
What is the role of HR in this hospital?

What is your role as HR manager? / Can you summarise what your job entails?
What are the challenges you face as head of HR in this hospital?

I understand that policies come from above, making you policy-implementers and not policymakers:
-    Can you talk a bit about the national health policies or strategies that deal with attrition and brain drain?
-    Are they mandatory – is part of your job to implement HR policies or strategies from the central government?
    o   If yes: how do you do this?

Is the hospital working to curb attrition and brain drain?
-    If yes: what is the hospital doing?
-    Are you free to come up with solutions on your own, or do you have to follow (strict) guidelines from the central government?

This hospital
Why do you think that there are such high attrition/turnover rates among the medical staff?

What are the different pay brackets of the different health cadres in this hospital?
-    Are the brackets decided centrally or by someone in this hospital?
    o   If centrally: do you have any influence on pay?
    o   If locally: who decides the pay?

D

Some people have talked about the prevalence of dual practice among the health staff in some departments. Is this something you know much about?
- I have both heard that it is illegal and legal. Are you able to tell me how it works?
- Do you think dual practice affects the workings of the hospital in any way?

Attrition and brain drain
High turnover is a problem among medical personnel – is this also the case among the support unit staff/administrative support staff?
- If yes: how do you think your colleagues leaving have affected your experience of working here?
- If yes: How do you think your colleagues leaving have affected this hospital/the Ethiopian public health service?

Do you think there is enough support unit staff employed in this hospital?
- If no: how do understaffing effect your experience of working here?
Do you think there is enough medical staff employed here? (especially physicians/nurses)
- If no: how do understaffing affected your experience of working here?
Does medical staff leaving this hospital affect you?
- If yes: how?
How do you think medical staff leaving this hospital to work in the private/NGO-sector and/or abroad affects this hospital?
How do you think medical staff leaving the public health service in Ethiopia affects this sector?

Does attrition affect your ability to effectively do your job?
Does attrition/high turnover affect your motivation?

Job satisfaction and plans to leave
What do you like the most about your job?
Is there anything you don't like about your job?

Do you feel that you can develop yourself professionally to the degree you want in this job?

Are you happy with your pay?
How long is your workday, generally?

Have you ever considered leaving the public sector?
Have you ever considered moving abroad?
Have other people leaving affected your desire to also leave?

Where do you see yourself in the future? (1 year, 5 years, 10 years)
- Do you intend to stay in this job/continue working in this hospital?
  o If yes: what is your reason for continuing to work here/in the public health system?
- Do you have plans to leave in the future?
- What are your career plans and aspirations?
  o Have these plans changed over the years?

E

History/trends

Have you noticed any trends in who tends to leave to work in the private/NGO sector and/or move abroad?
- From which departments?
- Seniority?
- Gender?
- Age?
- Marital status?
- Etc.?

End

Do you have anything you want to add that you think I should know but haven't asked about?

Appendix B: Information sheet and consent form

Are you interested in taking part in the research project "Understanding the effect of medical brain drain on Ethiopia's health sector: Health workers' perspectives"?

This is an inquiry about participation in a research project where the main purpose is to investigate how brain drain and attrition in the health service affect the Ethiopian health system. In this letter I will give you information about the purpose of the project and what your participation will involve.

Purpose of the project
This research project is conducted with the purpose of informing of a Master's thesis to be submitted as a part of the Development, Environment and Social Change master's programme at the University of Oslo, Norway.

This study ask how brain drain and attrition in the health service affect the Ethiopian health system through a case study in Jimma. It will examine how these challenges can be understood in a historical and political perspective, how health workers perceive and experience the effects of brain drain, and policy responses. This study asks four questions:
1) How can Ethiopia's medical brain drain be understood in historical and political perspective?
2) How does medical brain drain impact on Jimma's health system?
3) How do health workers perceive and experience the effects of brain drain within Jimma's health system?
4) What have been the main policy responses to medical brain drain in Ethiopia?

Factors like professional positions, levels of seniority, length of tenure, and education will be assessed to determine whether perceptions and experiences differ.

A range of health staff and policy makers will be interviewed to ensure comprehensive insight into the above questions. It is for this purpose that you are being asked to participate in the study.

Who is responsible for the research project?
The Centre for Development and Environment at the University of Oslo is the institution responsible for the project.

This project is also undertaken with support from the EXCEL SMART JUiO NORPART Project, which is a collaboration between Jimma University and the University of Oslo, and is nested within the Centre for Global Health at the University of Oslo.

What does participation involve?
The research methods used in this study is semi-structured and unstructured interviews, and study participants consent to being interviewed. Interview questions will focus on how medical brain drain and attrition affect health staff's work and motivation, what their future plans are, and reasons for staying in the Ethiopian public health service/reasons for leaving the public health service and either moving abroad or working elsewhere.

Interviews will be recorded and the researcher will take supporting notes during the interviews. The interview will then be transcribed (written out).

No questions about ethnicity or political affiliation will be asked, but all information given in the interview will be noted and potentially used where relevant.

Your personal privacy: how will your personal data be stored?
All respondents can choose to remain anonymous. The researcher will note your name, position at the hospital, how long you have worked there, your gender, and your education. Your contact information will also be noted, and you will be given the contact information of the researcher to use if you have any questions or choose to withdraw your consent. If you choose to be anonymous, you will be assigned a number by the researcher, which will be used to link you to your responses in the case that you choose to withdraw. The notes and recordings from the interview will only be marked with your number, and your personal information will be stored separately. This is done to prevent people (except the researcher and her supervisors) from tracing your responses back to you. Study participants are encouraged to speak freely as measures are in place to protect their identity. Furthermore, participants who wish to remain anonymous will not be identified in the final research report. However, the name of the hospital will be noted in the final research report

Your personal data will only be used for the purpose specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

After the scheduled end of the project in June 2020, data will be stored for up to a year afterwards in case the project is delayed. After this, all personal data will be deleted. This includes interview recordings and transcripts.

Participation is voluntary
Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. There will be no negative consequences for you if you chose not to participate or later decide to withdraw. If you choose to withdraw from the study, all your information will be made/remain anonymous.

Your rights
So long as you can be identified in the collected data, you have the right to:
- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?
We will process your personal data based on your consent.

Based on an agreement with The University of Oslo, NSD – The Norwegian Centre for Research Data AS has assessed that the processing of personal data in this project is in accordance with data protection legislation.

H

If you have any questions, please direct them to:
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Consent form

I have received and understood information about the project "Understanding the effect of medical brain drain and attrition on Ethiopia's health sector" and have been given the opportunity to ask questions. I give consent:

- ☐ To participate in an interview.
- ☐ For my personal data to be processed until the end date of the project, in June 2020, and for a year afterwards until approx. June 2021.
- ☐ For information about me to be published in a way that I can be recognised.
    - ○ Applicable where your job title may make you recognisable. Your name will not be published in the final report.

(Signed by participant, date)